

Human

Heterotypic Antibody Response in Human Volunteers after Ingestion of Attenuated Poliovirus.
 I. Effect of ingestion of Type I strains on antibody vs. Types II + III when Titer of antibody vs. III.

Group: status, Virus Ingested	Date	Titer of antibody vs. II								Titer of antibody vs. III										
		Pre	2	3	4	6	8	Pre	2	3	4	6	8							
Mah KP33	1/27/55	64	0	200+	200+	320+	200+	200	640											
"	"	0	0?	±	0	0	0	2000?	640											
"	"	0	3	0?	0?	0?	0?													
"	"	0	0	0	0	0	0													
Mah KP33		0	4+?	3	3	3	<2+													
Mah KP33	1/27/55	64	320	320	320+	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
"	"	320	320+	320+	320+	320+	320+	320+	320+	320+	320+	320+	320+	320+	320+	320+	320+	320+	320+	320+
"	"	20	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
LISC.	9/13/55	640	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
"	"	32	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
"	"	32	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
P2149	9/13/55	64	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+
"	"	320	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+
"	"	32	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+
P2226	9/13/55	320	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+	5200+
"	"	32	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
"	"	200	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+	3200+
trough P34	4/12/55																			
L5c	9/13/55																			
Poliovirus of Tenterden																				

Various levels acquired from ingestion of atten.

+ Hauser - 6 months after Type I - neg for Type 2 (see test of 10/14/55)

Ib

FEB 10 1956

Effect of ~~Type II Poliovirus~~ on chilli Volunteers ^{sera} who rec'd Type I (Mah. KP33) attenuated virus on 1/27/55 and who previously had naturally acquired Type II polio antibody.

Virus used: VSK KP35 Lot 4 of 1/4/54. Amp. 3 in A42.
100 TC₅₀ = 0/2 ml. of 10⁻⁵, use 1:50,000

Procedure: 0/4 ml. of 2x indic. conc. of serum / 1 hr. at room temp. 0/2 ml. per tube.
+ 0/4 ml. of virus 10^{-4.7}

Culture tubes used: Series T133A 2/1/56. Medium added 4/8/56. pH 8.2

Mixture Tested:	Tube No.	2/14	2/18
Virus + Hanks	1	40/ ✓	
	2	40/ ✓	
	3	40/ ✓	

pre- 1/27/55	1:2	4	0	0	
		5	0	0	
		6	0	0	
	6.7	10 ⁻¹	7	0	0
			8	2-3	4/ ✓
			9	40/ ✓	
10 ⁻²	10	40/ ✓			
	11	40/ ✓			
	12	40/ ✓			
3 wk - 2/17/55	1:2	13	0	0	
		14	0	0	
		15	0	0	
	10 ⁻¹	16	0	0	
		17	0	0	
		18	0	0	
	10 ⁻²	19	0	0	
		20	0	0	
		21	0	4/ ✓	

200 +?

cont.

Mixture tested:

Tube
No.
N

2/14
4

7/8
8

[Redacted]

4 wk. 2/24/55 1:2

22
23
24

0
0
0

0
0
0

10-1

25
26
27

0
0
0

0
0
0

200

10-2

28
29
30

0
0
0

4/8
0
0

6 wk. 3/10

1:2

31
32
33

0
0
0

0
0
0

320 or over

10-1

34
35
36

0
0
0

0
0
0

10-2

37
38
39

0
0
0

0
0
0

8 wk. 3/24

1:2

40
41
42

0
0
0

0
0
0

200

10-1

43
44
45

0
0
0

0
0
0

10-2

46
47
48

0
40/✓
0

0
0
0

[Redacted]

Pre 1/27/55 10-1

49
50
51

0
0
0

0
0
0

64

10-2

52
53
54

40/✓
0
40/✓

0
0
0

10-3

55
56
57

40/✓
40/✓
40/✓

cont.

Type II Poliovirus vs. chills: sera of Type I Exp. (Amph. KP33) of 1/27/55

Mixture tested:

Tube No. 2/14
N 4

8/8 FEB 10 1956

Mixture	Dilution	Tube No.	Result	Count
320	10 ⁻¹	58	0	0
		59	0	0
		60	0	0
	10 ⁻²	61	0	0
		62	0	0
		63	0	0
	10 ⁻³	64	40/✓	
		65	40/✓	
		66	40/✓	
4wk - 2/24/55	10 ⁻¹	67	0	0
		68	0	0
		69	0	0
	10 ⁻²	70	0	0
		71	0	0
		72	0	0
	10 ⁻³	73	40/✓	
		74	40/✓	
		75	40/✓	
8wk. 3/24/55	10 ⁻¹	76	0	0
		77	0	0
		78	0	0
	10 ⁻²	79	0	0
		80	0	0
		81	0	0
	10 ⁻³	82	40/✓	
		83	40/✓	
		84	40/✓	
Pre- 1/27/55	10 ⁻¹	85	0	0
		86	0	0
		87	0	0
	10 ⁻²	88	0	0
		89	0	0
		90	0	0
	10 ⁻³	91	40/✓	
		92	40/✓	
		93	40/✓	

cont.

mixture tested:

Tube No. 2/14 4 2/18 8

Wk.	Date	Dilution	Tube No.	2/14	2/18	
2 wk.	2/10/55	10 ⁻¹	94	0	0	
			95	0	0	
			96	0	0	
		3200 or over	10 ⁻²	97	0	0
				98	0	0
				99	0	0
			10 ⁻³	100	0	0
				101	0	0
				102	0	0
4 wk.	2/24/55	10 ⁻¹	103	0	0	
			104	0	0	
			105	0	0	
		3200 or over	10 ⁻²	106	0	0
				107	0	0
				108	0	0
			10 ⁻³	109	0	0
				110	0	0
				111	0	0
8 wk.	3/24/55	10 ⁻¹	112	0	0	
			113	0	0	
			114	0	0	
		3200 or over	10 ⁻²	115	0	0
				116	0	0
				117	0	0
			10 ⁻³	118	0	0
				119	0	0
				120	0	0
Pre-	1/27/55	10 ⁻¹	121	0	0	
			122	40/✓	0	
			123	0/✓	0	
		20	10 ⁻²	124	40/✓	✓
				125	40/✓	✓
				126	40/✓	✓
			10 ⁻³	127	40/✓	✓
				128	40/✓	✓
				129	40/✓	✓

cont.

Type II poliovirus vs. Chilli Sera of Type I (Muh. KP33) Exp. of 1/29/55

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mixture tested:

		Tube No	2/14	2/14
2 wk. 5/10/55	10 ⁻¹	130	0	0
		131	0	0
		132	0	0
	10 ⁻²	133	0	0
		134	0	0
		135	0	0
10 ⁻³	136	40/✓	✓	
	137	40/✓	✓	
	138	40/✓	✓	
4 wk. 2/24/55	10 ⁻¹	139	0	0
		140	0	0
		141	0	0
	10 ⁻²	142	0	0
		143	0	0
		144	0	0
10 ⁻³	145	40/✓	✓	
	146	40/✓	✓	
	147	40/✓	✓	
8 wk. 3/24/55	10 ⁻¹	148	0	0
		149	0	0
		150	0	0
	10 ⁻²	151	0	0
		152	0	0
		153	40/✓	✓
10 ⁻³	154	40/✓	✓	
	155	40/✓	✓	
	156	40/✓	✓	

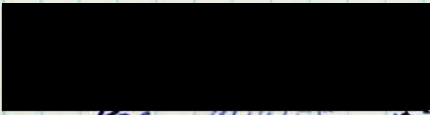
I b.

Effect of Type II Poliovirus on chilli volunteers who rec'd Type I (L.Sc) attenuated virus on 9/13/55 and who previously had naturally acquired Type II polio antibody.

Virus used: YSK KP 53 Lot 4 of 1/4/54 Amp. 3 in A-4-2
 100 TC₅₀ = 0.2 ml of 10⁻⁵ titre 1:50000

Procedure: 0.4 ml of 2x ind. conc. of serum } 1 hour at room temp. 0.2 ml
 + 0.4 ml of virus 10^{-4.7}

Culture tubes used: Series T_{138A} 2/1/56. medium added 2/8/56. pH 8.2

Mixture tested:	Tube No.	2/14	2/18
Virus + Hanks:	N	4	8
	1	4/1 ✓	
	2	4/1 ✓	
	3	4/1 ✓	
			
Pre 9/14/55 10 ⁻¹	157	0	0
	158	0	0
	159	0	0
640 10 ⁻²	160	0	0
	161	0	0
	162	0	0
10 ⁻³	163	0	0
	164	4/1 ✓	
	165	4/1 ✓	
Zwk 9/27/55 10 ⁻¹	166	0	0
	167	0	0
	168	0	0
2000 10 ⁻²	169	0	0
	170	0	0
	171	0	0
10 ⁻³	172	0	0
	173	4/1 ✓	
	174	0	0

cont.

Mixture tested:	Tube No.	2/14	2/18
[Redacted]	N	4	5
4 wk. 10/11/55	10-1	175	0
		176	0
		177	0
2000	10-2	178	0
		179	0
		180	0
10-3	181	0 alk.	0 alk.
	182	0	0
	183	40/✓	
8 wk. 11/8/55	10-1	184	0
		185	0
		186	0
3200 or over	10-2	187	0
		188	0
		189	0
10-3	190	0	0
		191	0
		192	0
[Redacted]			
Pre 9/14/55	10-1	193	0
		194	0
		195	0
32	10-2	196	40/✓
		197	40/✓
		198	40/✓
10-3	199	40/✓	✓
	200	40/✓	✓
	201	40/✓	✓
2 wk. 9/27	10-1	202	0
		203	0
		204	0
320	10-2	205	0
		206	0
		207	0
10-3	208	40/✓	
	209	0-1	40/✓
	210	40/✓	

cont.

Type II Poliovirus vs. Chilli Sera of Type I (L.Sc) Exp. of 9/13/55
 Mixture tested.

FEB 10 1956

			Tube No	2/14	2/14
9 wk	10/11/55	10 ⁻¹	211	0	0
			212	0	0
			213	0	0
	320	10 ⁻²	214	0	0
			215	0	0
			216	0	0
		10 ⁻³	217	4.0/	✓
			218	4.0/	✓
			219	4.0/	✓
8 wk	11/8	10 ⁻¹	220	0	0
			221	0	0
			222	0	0
	320	10 ⁻²	223	0	0
			224	0	0
			225	0	0
		10 ⁻³	226	4.0/	✓
			227	4.0/	✓
			228	4.0/	✓
11/2	9/14/55	10 ⁻¹	229	0	0
			230	0	0
			231	0	0
	32	10 ⁻²	232	4.0/	✓
			233	4.0/	✓
			234	4.0/	✓
		10 ⁻³	235	4.0/	✓
			236	4.0/	✓
			237	4.0/	✓
2 wk	9/27/55	10 ⁻¹	238	0	0
			239	0	0
			240	0	0
	320	10 ⁻²	241	0	0
			242	0	0
			243	0	0
		10 ⁻³	244	4.0/	✓
			245	4.0/	✓
			246	4.0/	✓

cont

Mixture tested:

9 wk. 10/11/55

Tube No
N
10 ⁻¹ .247
.248
.249

2/14
4

2/18
8

0
0
0

0
0
0

320

10 ⁻² .250
.251
.252

0
0
0

0
0
0

10 ⁻³ .253
.254
.255

~~40~~ ✓
~~40~~ ✓
~~40~~ ✓

8 wk. 11/8/55 10⁻¹

.256
.257
.258

0
0
0

0
0
0

320

10 ⁻² .259
.260
.261

0
0
0

0
0
0

10 ⁻³ .262
.263
.264

~~40~~ ✓
~~40~~ ✓
~~40~~ ✓

I b.

Effect of Type II poliovirus on akilli volunteers who rec'd Type I (P 2149) attenuated virus on 9/13/55 and who previously had naturally acquired Type II polio antibody.

Virus used: Ysk hP35 Lot 4 of 1/4/54. Amp 3 in A-4-2.
100 TC₅₀ = 0.2 ml. of 10⁻⁵, use 1:50,000.

Procedure used: 0.4 ml. of 2x indic. conc. of serum. / 1 hr. at room temp.
+ 0.4 ml. of virus 10^{-4.7} / 0.2 ml. per tube.

Culture tubes used: Series T₁₃₄ of 2/2/56, medium added 2/9/56. pH 8.2.

Mixture tested:	Tube NO.	2/14	2/18
Virus + Hank's	N	4	8
	1	40/✓	
	2	41/✓	
	3	42/✓	
[Redacted]			
10 ⁻¹	265	0	0
	266	0	0
	267	0	0
64			
10 ⁻²	268	0	0
	269	0	4ff
	270	0	4ff
10 ⁻³	271	40/✓	
	272	41/✓	
	273	0	4ff
2 wk. 9/27/55			
10 ⁻¹	274	0	0
	275	0	0
	276	0	0
3200 or over			
10 ⁻²	277	0	0
	278	0	0
	279	0	0
10 ⁻³	280	0	0
	281	0	0
	282	0	0

cont.

Machines tested:

Tube No.

2/14

2/15

N

4

4

[Redacted]

4 wk.

10⁻¹ 283
284
285

0
0
0

0
0
0

3200 or over

10⁻² 286
287
288

0
0
0

0
0
0

10⁻³ 289
290
291

0
0
0

0
0
0

8 wk. 11/8

10⁻¹ 292
293
294

0
0
0

0
0
0

3200 or over

10⁻² 295
296
297

0
0
0

0
0
0

10⁻³ 298
299
300

0
0
0

0
0
0

[Redacted]

Pre. 9/14

10⁻¹ 301
302
303

0
0
0

0
0
0

320

10⁻² 304
305
306

0
0
0

0
0
0

10⁻³ 307
308
309

4.1 ✓
4.2 ✓
4.3 ✓

2 wk. 9/27/55

10⁻¹ 310
311
312

0
0
0

0
0
0

3200 or over

10⁻² 313
314
315

0
0
0

0
0
0

10⁻³ 316
317
318

0
0
0

0
0
0

cont.

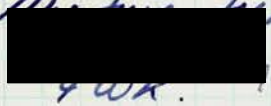
Type II Poliovirus vs Chilli: Sera of Type F (P. 1955) of 9/13/55
 Mixtures tested:

FEB 10 1956

Mixtures tested:	10/11	10-1	Tube No.	+	0
[Redacted]			319	0	0
			320	0	0
			321	0	0
3200 or over		10-2	322	0	0
			323	0	0
			324	0	0
		10-3	325	0	0
			326	0	0
			327	0	0
8 wk. 11/8		10-1	328	0	0
			329	0	0
			330	0	0
2000		10-2	331	0	0
			332	0	0
			333	0	0
		10-3	334	0	0
			335	0 ✓	0
			336	0 ✓	0
[Redacted]					
Proc. 9/14		10-1	337	0	0
			338	0	0
			339	0	0
32		10-2	340	40 ✓	
			341	40 ✓	
			342	40 ✓	
		10-3	343	40 ✓	
			344	40 ✓	
			345	40 ✓	
2 wk. 9/27		10-1	346	0	0
			347	0	0
			348	0	0
3200 or over		10-2	349	0	0
			350	0	0
			351	0	0
		10-3	352	0	0
			353	0	0
			354	0	0

over

Machine tested.



4 wk. 10/11

3200 or over

Take No	2/14	2/11
10-1 355	0	0
356	0	0
357	0	0

10-2 358	0	0
359	0	0
360	0	0

10-3 361	0	0
362	0	0
363	0	0

fwk. 11/8

3200 or over

10-1 364	0	0
365	0	0
366	0	0

10-2 367	0	0
368	0	0
369	0	0

10-3 370	0	0
371	0	0
372	0	0

Ib.

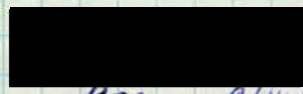
Effect of Type II Poliovirus on chilli volunteers who rec'd Type I (P2226) attenuated virus on 9/13/55 and who previously had naturally acquired Type II polio antibody.

Virus used: YSK 4135 Lot 4 of 1/4/54. Amp. 3 in B-4-2
100 TCD₅₀ = 0/2 ml. of 10⁻⁵, use 1:50,000.

Procedure: 0/4 ml. of 2x indic. conc. of serum + 0/4 ml. of virus 10^{-4.7} | 1 hr. at room temp.
0/2 ml. per tube.

Culture tubes used: Serial T₁₃₄ of 2/2/56. medium added. 2/9/56 pH 8.2

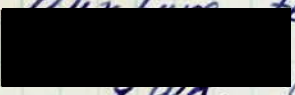
mixture tested:	Tube No.	2/14	2/18
Virus + Hanks	N	4	8
	1	4 ✓	
	2	4 ✓	
	3	4 ✓	



Pre	9/14/55	10 ⁻¹	373	0	0
			374	0	0
			375	0	0
320		10 ⁻²	376	0	0
			377	0	0
			378	0	0
		10 ⁻³	379	4 ✓	
			380	4 ✓	
			381	4 ✓	
2 wk.	9/27/55	10 ⁻¹	382	0	0
			383	0	0
			384	0	0
3200 or over		10 ⁻²	385	0	0
			386	0	0
			387	0	0
		10 ⁻³	388	0	0
			389	0	0
			390	0	0

Cont.

Murkums tested:



Tube No.

2/14
4

2/18
8

9 wk. 10/11

10-1 391
392
393

0
0
0

0
0
0

3200 or over

10-2 394
395
396

0
0
0

0
0
0

8 wk. 11/8

10-3 397
398
399

0
0
0

0
0
0

3200 or over

10-1 400
401
402

0
0
0

0
0
0

10-2 403
404
405

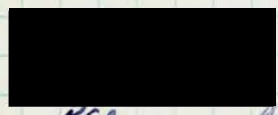
0
0
0

0
0
0

10-3 406
407
408

0
0
0

0
0
0



11/14/55

10-1 409
410
411

0
0
0

0
0
0

32

10-2 412
413
414

412 ✓
413 ✓
414 ✓

10-3 415
416
417

415 ✓
416 ✓
417 ✓

2 wk. 9/27/58

10-1 418
419
420

0
0
0

0
0
0

2000

10-2 421
422
423

0
0
0

0
0
0

10-3 424
425
426

424 ✓
425 ✓
426 ✓

0
0
0

cont.

Mixture tested:	Tube No	2/14	2/18	
4 wk. 10/11 2000	10-1	463	0	
		464	0	
		465	0	
	10-2	466	0	
		467	0	
		468	0	
	10-3	469	40/1 ✓	
		470	0	
		471	0	
	8 wk. 11/8 3 100 or over	10-1	472	0
			473	0
			474	0
10-2		475	0	
		476	0	
		477	0	
10-3		478	0	
		479	0	
		480	0	

Note: 2/14 Most of the tubes show fissure retraction and large holes appear

Ib.

FEB 15 1956

Effect of Type III Poliovirus on Chilli volunteers, ^{sera} who rec'd Type I (Mah. KP33) attenuated virus on 1/27/55 and who previously had naturally acquired Type III antibody:

Virus used: Leon KP36 Lot 2 of 1/4/54. Amp I in A-4-5
100 TC₅₀ = 0.2 ml. of 10^{-4.6} Use: 20,000

Procedure: 0.4 ml. of 2x indic. serum conc. / 1 hr. at room temp
+ 0.4 ml. of virus / 0.2 ml. per tube.

Culture tubes used: Series T135 of 2/2/56. medium added 2/13/56 pH 8.2.

Mixture tested:	Tube No	2/19	2/23
Virus + Hanks	N	4	8
	481	eff	
	482	eff	
	483	eff	

Pre.	1/27/55	10 ⁻¹	484	0	0
			485	0	0
			486	0	0
	200	10 ⁻²	487	0	0
			488	0	eff
			489	0	0
		10 ⁻³	490	eff	
			491	eff	
			492	eff	
2 wk.	2/10/55	10 ⁻¹	493	0 _v	0 _v
			494	0 _v	0 _v
			495	0	0 _v
	640	10 ⁻²	496	0	0
			497	0 _v	0
			498	0 _v	0
		10 ⁻³	499	eff	
			500	0 _v	0 _v
			501	eff	

cont.

H. H. H. H.

Mixture tested:

Tube NO.

2/19

2/23

[Redacted]

4 wt. 2/24/55 10⁻¹

502
503
504

0
0
0

0
0
0

10⁻²

505
506
507

0
0
0

0
0
0

640

10⁻³

508
509
510

0
0
eff

4ff
0

8 wt. 3/24/55 10⁻¹

511
512
513

0
0
0

0
0
0

10⁻²

514
515
516

0
0
0

0
0
0

640

10⁻³

517
518
519

eff
0
eff

0

[Redacted]

17 wt. 1/24/55 10⁻¹

520
521
522

0
0
0

0
0
0

10⁻²

523
524
525

0
0
0

0
0
0

320

10⁻³

526
527
528

eff
eff
eff

2 wt. 2/10/55 10⁻¹

529
530
531

0
0
0

0
0
0

320

10⁻²

532
533
534

0
0
0

0
0

10⁻³

535
536
537

eff
0
eff

4ff

cont.

Type III Poliovirus vs. Chilli Sera of Type I (Nuh. KP33) Exp. of 1/27/55
 mixture tested: T₁ No. 4/19 FEB 15 1956 4/23

Wk.	Date	Dilution	T ₁ No.	Result	Result
4 wk.	2/24/55	10 ⁻¹	538	0	ov
			539	0	ov
			540	0	ov
		10 ⁻²	541	0	ov
			542	0	ov
			543	0	ov
		10 ⁻³	544	ov	ov
			545	eff	
			546	ov	ov
8 wk.	3/24/55	10 ⁻¹	547	0	ov
			548	0	ov
			549	0	ov
		10 ⁻²	550	0	ov
			551	0	ov
			552	0	ov
		10 ⁻³	553	eff	
			554	eff	
			555	0	ov
pic	4/27/55	10 ⁻¹	556	0	ov
			557	0	ov
			558	0	ov
		10 ⁻²	559	eff	
			560	eff	
			561	eff	
		10 ⁻³	562	eff	
			563	eff	
			564	eff	
2 wk.	2/10/55	10 ⁻¹	565	0	ov
			566	0	ov
			567	0	ov
		10 ⁻²	568	0	ov
			569	0	ov
			570	0	ov
		10 ⁻³	571	eff	
			572	eff	
			573	eff	

cont.

Mixture tested:	Tube No.	4/9	7/23	
4 wk. 2/24/55	10 ⁻¹ 574	0	0 ✓	
	575	0	0 ✓	
	576	0	0 ✓	
	3 ²⁰ 10 ⁻²	577	0	0 ✓
		578	0	0 ✓
		579	0	0 ✓
	10 ⁻³	580	4ff	
		581	4ff	
		582	4ff	
8 wk. 3/24/55	10 ⁻¹ 583	0	0 ✓	
	584	0	0 ✓	
	585	0	0 ✓	
	3 ²⁰ 10 ⁻²	586	0	0 ✓
		587	0	0 ✓
		588	0	0 ✓
	10 ⁻³			
	10 ⁻³	589	4ff	
	590	4ff		
591	4ff			
7 wk. 4/24/55	10 ⁻¹ 592	4ff		
	593	0	0 ✓	
	594	0	0 ✓	
	20 10 ⁻²	595	4ff	
		596	4ff	
		597	4ff	
	10 ⁻³	598	4ff	
		599	4ff	
		600	4ff	
2 wk. 2/10/55	10 ⁻¹ 601	4ff		
	602	0	0 ✓	
	603	0	0 ✓	
	20 10 ⁻²	604	4ff	
		605	4ff	
		606	4ff	
	10 ⁻³	607	4ff	
		608	4ff	
		609	4ff	

cont.

STANDARD B & P "NOTEAR"

STANDARD B & P "NOTEAR"

Type III Poliovirus vs. Chilli sera of Type I (Mab. KP33) of 1/22/56

Mixture tested. ⁷⁴⁶

FEB 15 1956

Wk.	Date	Dilution	Serum	Result	Result
9 wk.	2/24/55	10 ⁻¹	610	0	ov
			611	0	ov
			612	0	ov
3 v	10 ⁻²	613	eff		
		614	eff		
		615	eff		
	10 ⁻³	616	eff		
		617	eff		
		618	eff		
8 wk.	3/24/55	10 ⁻¹	619	0	ov
			620	0	ov
			621	0	ov
3 v	10 ⁻²	622	eff		
		623	eff		
		624	eff		
	10 ⁻³	625	eff		
		626	eff		
		627	eff		

I b.

Antibody level FEB 15 1956

sera

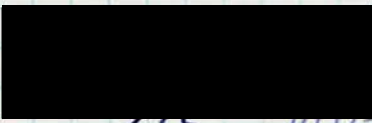
Effect ^{on} of Type III Poliovirus on Chilli volunteers, who rec'd Type I (L. Sc.) attenuated virus on 9/13/55 and who previously had naturally acquired Type III antibody.

Virus used: **Leon**

Procedure:

Culture tubes used:

Mixture tested:	Tube No.	2/19	2/23
Virus + Hanks.	N	4	8



[Redacted]	10 ⁻¹	628	0	ov
		629	0	ov
		630	0	ov
640	10 ⁻²	631	0	ov
		632	0	ov
		633	0	ov
[Redacted]	10 ⁻³	634	4/4	
		635	0	ov
		636	4/4	
2 wk. 9/27/55	10 ⁻¹	637	0	ov
		638	0	ov
		639	0	ov
320	10 ⁻²	640	0	ov
		641	0	ov
		642	0	ov
[Redacted]	10 ⁻³	643	4/4	
		644	4/4	
		645	4/4	

Cont.

Thomson & Co.

Mixture tested:

Type
N No.

4/9

4/23

4

8

0

0 ✓

4 off

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

4 off

4 off

4 off

4 off

4 off

4 off

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

4 off

4 off

0

0 ✓

0

0 ✓

0

0 ✓

4 off

4 off

4 off

4 off

4 off

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

4 off

4 off

0

0 ✓

0

0 ✓

0

0 ✓

4 off

4 off

4 off

4 off

4 off

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

4 off

4 off

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

0

0 ✓

[Redacted]

10-1

646

647

648

10-2

649

650

651

10-3

652

653

654

8 wk. 11/8

10-1

655

656

657

200

10-2

658

659

660

10-3

661

662

663

[Redacted]

1 wk 9/14/55 10-1

664

665

666

200

10-2

667

668

669

10-3

670

671

672

2 wk. 9/27/55 10-1

673

674

675

640

10-2

676

677

678

10-3

679

680

681

cont.

Type III Poliovirus vs. Chilli. Sera of Type I (L.Sc) Exp. of 9/13/55

4/23 FEB 15 1956

Weight	Date	Dilution	Tube No.	Result	Result
9 wt. 11/11	10 ⁻¹	682	0	ov	
		683	0	ov	
		684	0	ov	
	3 20	10 ⁻²	685	0	ov
			686	0	ov
			687	0	ov
		10 ⁻³	688	4ff	
			689	4ff	
			690	4ff	
8 wt. 11/8	10 ⁻¹	691	0	ov	
		692	0	ov	
		693	0	ov	
	3 20	10 ⁻²	694	0	ov
			695	0	ov
			696	0	ov
		10 ⁻³	697	4ff	
			698	4ff	
			699	4ff	
172 9/14	10 ⁻¹	700	0	ov	
		701	4ff		
		702	0	4ff	
	6.4	10 ⁻²	703	4ff	
			704	4ff	
			705	4ff	
		10 ⁻³	706	4ff	
			707	4ff	
			708	4ff	
	2 wt. 9/27	10 ⁻¹	709	0	ov
			710	0	ov
			711	0	ov
6.4		10 ⁻²	712	4ff	
			713	0	ov
			714	4ff	
		10 ⁻³	715	4ff	
			716	4ff	
			717	4ff	

Mixture tested:

[Redacted]

10/11

10⁻¹

Tube
No.
718
719
720

2/9
0
off
off
0

2/23
0
0

20

10⁻²

721
722
723

off
off
off

10⁻³

724
725
726

off
off
off

8 wk. 11/8

10⁻¹

727
728
729

0
0
0

0
0

32

10⁻²

730
731
732

off
off
off

10⁻³

733
734
735

off
off
off

Ib.

Effect of Type III Poliovirus on Chilli
volunteers' ^{sera} who rec'd Type I (P2149)
attenuated virus on 9/13/55 and who
previously had naturally acquired Type III
antibody.

Virus used: Leon KP36 Lot 2 of 11/4/54. Amp 5 in A-4-2
100 TCD₅₀ = 0.2 ml. of 10^{-4.6} use 1:20,000

Procedure: 0.4 ml. of 2x indic serum conc / chr. at room temp
+ 0.4 ml. of virus / 0.2 ml. per tube

Culture tubes used: Series T155A 2/18/56. medium
added 2/16/56. plt. 2.4.

Mixture tested:	Tube No.	2/20 4	2/24 8
Virus + Hanks.	N. 952	✓	
	953	✓	
	954	✓	
[Redacted]			
Mc. 9/14/55	10 ⁻¹ 736	0	0
	737	0	0
	738	0	0
5200 or over	10 ⁻² 739	0	0
	740	0	0
	741	0	0
	10 ⁻³ 742	0	0
	743	0	0
	744	1	? mold
2000	10 ⁻¹ 745	0	0
	746	0	0
	747	0	0
3200 or over	10 ⁻² 748	0	0
	749	0	? mold
	750	0	0
	10 ⁻³ 751	0	0
	752	0	0
over	753	0	0

Mixture tested:

[Redacted]

9 wk. 10/11

3200 or over ✓

8 wk. 11/8

2000

[Redacted]

7c 9/14/55

20

2 wk. 9/27/55

200

Tube
no.

10-1^N
754
755
756

10-2
757
758
759

10-3
760
761
762

10-1
763
764
765

10-2
766
767
768

10-3
769
770
771

10-1
772
773
774

10-2
775
776
777

10-3
778
779
780

10-1
781
782
783

10-2
784
785
786

10-3
787
788
789

2/4

0
0
0

0_{count} ✓
0
0

0
0
0

0
0
0

0
0
0_{count} ✓

0
0
0

0
0
0

eff
eff
eff

eff
eff
eff

0
0
0

0
0
2-3

eff
eff
eff

4/24
8

0
0
0

0
0

0
0
0v

0
0
0

0
0

4/16
0
0

0
0
4/16 mold

4/16
0
4/16

STANDARD B & P "N"

STANDARD B & P "NOISEAR"

Type III Poliovirus vs. Chilli Sera of Type I (P2149) Exp. of 9/13/55

FEB 16 1956

Mixture tested.

[Redacted]

10/11

Type No.

10⁻¹ 790
791
7922/20
4
0
0
Count7/24
8
0v
0

320

10⁻² 793
794
7950v
0
00p
0
0m10⁻³ 796
797
7984df
4df
4df

8 wk. 11/8

10⁻¹ 799
800
8010
0
00
0v
4df

64

10⁻² 802
803
8040
4df
00
0m10⁻³ 805
806
8074df
4df
4df

[Redacted]

1/2 9/14

10⁻¹ 808
809
8100
0
04df
4df
0v

64

10⁻² 811
812
8134df
4df
4df10⁻³ 814
815
8164df
4df
4df

2 wk. 9/27

10⁻¹ 817
818
8190
0
00
0
0

32

10⁻² 820
821
8222-3
4df
4df

4df

10⁻³ 823
824
8254df
4df
4df

over.

Mixture tested:

[redacted] 11/11

Tube No.

10⁻¹ 826
827
828

32

10⁻² 829
830
831

10⁻³ 832
833
834

8 wk. 11/8

10⁻¹ 835
836
837

200

10⁻² 838
839
840

10⁻³ 841
842
843

2/20

4

0
0
0

3+
3+
0

4+
4+
4+

0
0
0

0
4+
0

4+
4+
4+

7/24

8

0+
0
0+

4+
4+ m
4+

0
0
0

0
0
0

Ib.

FEB 16 1956

Effect of Type III Poliovirus on Chilli

Volunteers ^{sera} who rec'd Type I (P2226) attenuated virus on 9/13/55 and who previously had naturally acquired Type III antibody.

Virus used:

Procedure:

Culture tubes used:

Mixture tested:

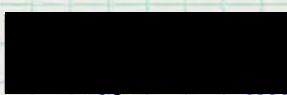
Virus + Hanks

Same as test vs. Type I (P2149)

Tube No.

2/20
4

2/24
8



Date	Dilution	Tube No.	Result
Pre 9/14	10 ⁻¹	844	4th
		845	4th
		846	4th
Previous test undil - 9/13	10 ⁻²	847	4th
		848	4th
		849	4th
4	10 ⁻³	850	4th
		851	4th
		852	4th
2 wk. 9/27	10 ⁻¹	853	4th
		854	4th
		855	4th
4?	10 ⁻²	856	4th
		857	4th
		858	4th

over

Mixture tested:

[Redacted]

Tube No

2/20

2/24

4

8

2 wk.

10-3

859
860
861

4
4
4

4 wk.

10/11

10-1

862
863
864

0
0
0

0
0
4

20

10-2

865
866
867

4
4
4

10-3

868
869
870

4
4
4

8 wk.

11/8

10-1

871
872
873

3-4
3-4
0

4
4
0

6

10-2

874
875
876

4
4
4

10-3

877
878
879

4
4
4

[Redacted]

Pre

9/14

10-1

880
881
882

1
0
0

4
? mold
0

20

10-2

883
884
885

4
4
4

10-3

886
887
888

4
4
4

2 wk.

9/27

10-1

889
890
891

0
0 conty ✓
0

0
0
0

200

10-2

892
893
894

0
1
0

0
4
0

cont.

FEB 16 1956

Type III Poliovirus vs. Chilli Sera of Type I (P2226) Exp. of 9/13/55-
 mixture tested: Tube 2/24

		N	Tube		
2wk.	[redacted]	10-3	895	4/10	
			896	4/11	
			897	4/12	
4wk.	10/11	10-1	898	0	om
			899	0	0
			900	0	ov
	320	10-2	901	0	ov
			902	0	0
			903	0	0
	10-3	904	4/11		
		905	4/12		
		906	4/13		
8wk.	11/8	10-1	907	0	0
			908	0	0
			909	0	0
	320	10-2	910	0	0
			911	0	0
			912	0	0
	10-3	913	4/11		
		914	4/12		
		915	4/13		
Pre	9/14	10-1	916	0	0
			917	0	ov
			918	0	om
	64	10-2	919	0	0
			920	4/11	
			921	4/12	
	10-3	922	4/11		
		923	4/12		
		924	4/13		
2wk.	9/27	10-1	925	0	0
			926	0	0
			927	0	ov
	2000	10-2	928	0	0
			929	0	ov
			930	0	0

over

Mixtures tested:



2 wk.

10-3

Tube No
N

931
932
933

2/20
4
4ff
0
0

2/24
8
0v
0v

4 wk.

10/11

10-1

934
935
936

0
0
0

0v
0v
0

320

10-2

937
938
939

0
0
0cont

0v
0v
0m

10-3

940
941
942

4ff
4ff
4ff

8 wk.

11/8

10-1

943
944
945

0
0
0

0
0
0

320

10-2

946
947
948

0
0
0

0
0m
0v

10-3

949
950
951

4ff
4ff
4ff

Type 3 Polio

(10)

Test for heterotypic ~~Antibody~~ response in Human Volunteer [redacted], who ^{had} received Type III (Leon KP34) on 4/7/55 ~~and~~ ^{to} Type I (LSC) on 9/13/55.

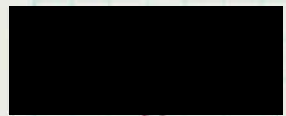
Virus used: Leon KP 36, Lot 2 of 1/4/54 Amp. I in A-475
100 TCD₅₀ = 0.2 ml of 10^{6.6} u.c. 1:20000

Procedure: 0.4ml of 2x indic. conc. of serum } 1 hour at room temp.
+ 0.4ml of virus 10^{-4.3} } 0.2ml / tube

Culture Tubes used: Series T₁₃₅A of 2/1/56; Medium added 2/8/56 @ 9.2.

Mixture tested:

Virus + Hanks



Serum of 6/30/55 had titer of 1:20 4?

-pre- 9/13/55 10⁻¹

-3wk- 10/4

4?

Tube No	2/24	2/28
1	4	8
2	4	
3	4	
4	4	
5	4	
6	4	
7	4	
8	4	
9	4	
10	4	
11	4	
12	4	
13	0	4
14	24	4
15	24	4
16	4	
17	4	
18	4	
19	4	
20	4	
21	4	
22	4	
23	4	
24	4	

over!

Mixture tested:

4wk - 10/11
 1wk after "11"
 "P" 712 b

Concentration	Tube No	Result	Count
10^{-1}	25	4/6	8
	26	2/3	4/6
	27	0	0
10^{-2}	28	4/6	
	29	4/6	
	30	4/6	
10^{-3}	31	4/6	
	32	4/6	
	33	4/6	
10^{-4}	34	4/6	
	35	4/6	
	36	4/6	
10^{-1}	37	0	0v
	38	0	0v
	39	0v	0v
10^{-2}	40	4/6	
	41	0v	0v
	42	0v	0v
10^{-3}	43	4/6	
	44	4/6	
	45	4/6	
10^{-4}	46	4/6	
	47	4/6	
	48	4/6	

- 8wk - 11/8

5wks after "712"

200

1c.

MAR 12 1955

Heterotypic Type III antibody response in childlike volunteer who had "experimentally" acquired Type III antibody [feeding of Type III () on] prior to receiving Type I (mahoney) attenuated poliovirus on 4/21/55.

Virus used: Leon KP 36 Lot 2 of 1/4/54. Amp 1 in A-V-5. 100 TC₅₀ = 0.2 ml. of 10^{-4.6}; use 1:20,000.

Procedure: 0.4 ml. of 2x indic. serum conc. / 1 hr. at room temp. + 0.4 ml. of virus 10^{-4.3} / 0.2 ml. per tube.

Culture tubes used: Series T142 3/2/56. medium added 3/4/56 pH 7.2

Mixtures tested:	Tube No.	3/16	3/20
Virus + Hanks	N. 106	eff	
	107	eff	
	108	eff	
[redacted] 4/21/55 1:2	127	0	0
	128	0	0
Pre mahoney	129	0	0
732 10 ⁻¹	130	0	0
	131	0	0
	132	0	0
2 wk. 5/5/55 10 ⁻¹	133	0	0
	134	0	0
	135	0	0
64 10 ⁻²	136	0	eff
	137	0	eff
	138	0	eff
10 ⁻³	139	eff	
	140	eff	
	141	eff	

Mixture tested.

Tube
No

3/16

3/20

4 wk.

5/19/55

10⁻¹ .142

.143

.144

4

0

0

0

8

0

0

0

320

10⁻² .145

.146

.147

0

0

0

0

0

0

10⁻³ .148

.149

.150

eff
eff
eff

8 wk.

6/16/55

10⁻¹ .151

.152

.153

0

0

0

0

0

0

64

10⁻² .154

.155

.156

0

eff
eff

0

10⁻³ .157

.158

.159

eff
eff
eff

Effect of Type I Poliovirus on Sera of
 Chill. Volunteers, who received Type II (YSK-KP51)
 attenuated virus on 1-13-55 and had previous
 natural acquired Type I Polioantibody.

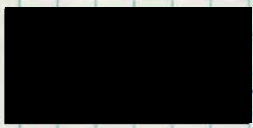
Virus used: Mahoney KP35: Lot #4 of 1/4/54 Amp. 4 in A.V.2
 100 TCD₅₀ = 0.2 ml. of 10^{-4.3} Use 1:10,000.

Procedure: 0.4 ml of 2x indic. conc. of serum } 1 hour at room
 + 0.4 ml of virus 10⁻⁴ } temp. 0.2 ml / tube

Culture Tubes used: T-130 1/17/56. Medium added 1/23/56
 0.5% final cell serum. pH 8.2

Mixture tested:

		Tube No	2/4	2/8
Virus + Hanks		1	4.0/ ✓	8
		2	4.0/ ✓	
		3	4.0/ ✓	
	pre- (1/13/55)	4	0	0
	1 wk - 1/20/55	5	0	0
		6	0 ✓	0 ✓
		7	4.0/ ✓	
		8	4.0/ ✓	
		9	4.0/ ✓	
		10	4.0/ ✓	
		11	4.0/ ✓	
		12	4.0/ ✓	
		13	0	0 ✓
		14	0	0 ✓
		15	0	0 ✓
		16	0	0
		17	0	0
		18	0	0
		19	4.0/ ✓	
		20	4.0/ ✓	
		21	4.0/ ✓	

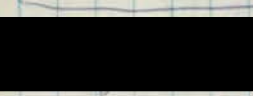


32

320

over

Mixture tested:



4 wks - 2/10/55

320

8 wks - 3/10/55

320



pre - 4/13/55

32

2 wks - 1/27/55

320

		Tube No	2/4	2/8	
10 ⁻¹	22	22	0	0	
		23	0	0	
		24	0	0	
	10 ⁻²	25	25	0	0
			26	0	0
			27	0	0
	10 ⁻³	28	28	40/ ✓	
			29	40/ ✓	
			30	40/ ✓	
10 ⁻¹	31	31	0	0	
		32	0	0	
		33	0	0 ✓	
	10 ⁻²	34	34	0	0
			35	0	0
			36	0	0
10 ⁻³	37	37	40/ ✓		
		38	40/ ✓		
		39	40/ ✓		
10 ⁻¹	40	40	0	0	
		41	0	0 ✓	
		42	0	0 ✓	
	10 ⁻²	43	43	40/ ✓	
			44	40/ ✓	
			45	40/ ✓	
10 ⁻³	46	46	40/ ✓		
		47	40/ ✓		
		48	40/ ✓		
10 ⁻¹	49	49	0	0 ✓	
		50	0	0	
		51	0	0	
	10 ⁻²	52	52	0	0
			53	0 ✓	0 ✓
			54	0	0 ✓
10 ⁻³	55	55	40/ ✓		
		56	40/ ✓		
		57	40/ ✓		

contin.

Type I Polio virus vs. Chill. Vol. Sera, who received Type II and had Type I Polio antibody 1/31/56

Mixture tested:		Tube No	2/4	2/8
		N	4	8
4 wk - 2/10/55	10 ⁻¹	58	0	0
		59	0	0
		60	0	0 ✓
	10 ⁻²	61	0	0
		62	0	0
		63	0	0
	10 ⁻³	64	40/ ✓	
		65	40/ ✓	
		66	40/ ✓	
- 8 wks - 3/10	10 ⁻¹	67	0	0
		68	0	0
		69	0	0
	10 ⁻²	70	0	0
		71	0	0
		72	0	0 ✓
	10 ⁻³	73	40/ ✓	
		74	40/ ✓	
		75	40/ ✓	
- pre - 1/13/55	10 ⁻¹	76	0	0
		77	0	0
		78	0	0
	10 ⁻²	79	0	0
		80	0	0
		81	0	0
	10 ⁻³	82	40/ ✓	
		83	40/ ✓	
		84	40/ ✓	
- 2 wk - 1/27/55	10 ⁻¹	85	0	0
		86	0	0
		87	0	0
	10 ⁻²	88	0	0
		89	0	0 ✓
		90	0	0 ✓
	10 ⁻³	100	0	0 ✓
		101	0	0
		102	0	0 ✓

over!

Mixture tested:



4wk - 2/10/55

3200 or over

8wk - 3/10/55

3200 or over

pre - 1/13/55

32

2wks - 1/27/55

32

	Tube No	2/4	2/8
10^{-1}	103	0	0
	104	0	0
	105	0	0
10^{-2}	106	0	0
	107	0	0
	108	0	0
10^{-3}	109	0	0
	110	0	0
	111	0	0
10^{-1}	112	0	0
	113	0	0
	114	0	0
10^{-2}	115	0	0
	116	0	0
	117	0	0
10^{-3}	118	0	0
	119	0	0
	120	0	0
10^{-1}	121	0	0
	122	0	0
	123	0	0
10^{-2}	124	4.0 ✓	
	125	4.0 ✓	
	126	4.0 ✓	
10^{-3}	127	4.0 ✓	
	128	4.0 ✓	
	129	4.0 ✓	
10^{-1}	130	0	0
	131	0	0
	132	0	0
10^{-2}	133	4.0 ✓	
	134	4.0 ✓	
	135	4.0 ✓	
10^{-3}	136	4.0 ✓	
	137	4.0 ✓	
	138	4.0 ✓	

contin.

STANDARD B & P "NOTEAR"

STANDARD B & P "NOTEAR"

Type I Poliovirus v.s. Child. Vol. sera, who received Type II and had Type I Polioantibody content.

Mixture tested:		Tube No	2/4	2/8
- 4 wks - 2/10/55	10^{-1}	139	0	0 ✓
		140	0	0
		141	0	0
	64 10^{-2}	142	0	0 ✓
		143	4.0 ✓	
		144	4.0 ✓	
	10^{-3}	145	4.0 ✓	
		146	4.0 ✓	
		147	4.0 ✓	
	- 8 wks - 3/10/55	10^{-1}	148	0
149			0	0
150			0	0
32 10^{-2}		151	4.0 ✓	
		152	4.0 ✓	
		153	4.0 ✓	
10^{-3}		154	4.0 ✓	
		155	4.0 ✓	
		156	4.0 ✓	

II 6

Effect of Type I Poliovirus on Sera of Childlike Volunteers, who received Type II (P 712) Poliovirus on 10-4-55 and had previous natural acquired Type I Polio antibody

Virus used: Mahoney KP35. Lot #4 of 1/4/54. Amp. 4 in A-4-2. 100 TCD₅₀ = 0.2 ml. of 10^{-4.3}, use 1:10,000.

Procedure: 0.4 ml of 2x indic. conc. of serum } 1 hour at room temp. 0.2 ml/tube
+ 0.4 ml of virus

Culture Tubes used: Series T131 of 1/20/56. medium changed 1/26/56. pH 8.2.

Mixture tested:

		Tube No	2/4	2/8
Virus + Hank's		N	4	8
		1	4.0/✓	
		2	4.0/✓	
		3	4.0/✓	
	-pre- 10/4/55	10 ⁻¹	157 0	0 _v
			158 0	0 _v
			159 0	0 _v
	64	10 ⁻²	160 4.0/✓	
			161 0	0 _v
			162 4.0/✓	
		10 ⁻³	163 4.0/✓	
			164 4.0/✓	
			165 4.0/✓	
	-2 wks- 10/18	10 ⁻¹	166 0	0 _{out}
			167 0 _v	0 _{out}
			168 0	0 _v
		10 ⁻²	169 0	0 _v
			170 0	0 _v
			171 0	0
		10 ⁻³	172 0	0
			173 0 _v	0 _{out}
			174 0 _v	0 _{out}
	-4 wks- 11/1	10 ⁻¹	175 0	0 _v
			176 0	0 _v
			177 0	0 _v
		10 ⁻²	178 0	0 _v
			179 0	0 _v
			180 0 _v	0 _{out} over!



Mixture tested:

		N	Tube No	2/4	2/8
4wk - contin.	10 ⁻³	181	0	0	0
		182	0	0	0
		183	0	0	0 _{sup}
- 8wks - 11/29/55 ✓	10 ⁻¹	184	0	0	0 _v
		185	0	0	0
		186	0	0	0 _v
3 2 nd or over	10 ⁻²	187	0	0	0 _v
		188	0	0	0
		189	0	0	0 _v
10 ⁻³	10 ⁻³	190	0	0	0 _v
		191	0	0	0 _v
		192	0	0	0
- 10/4/55 ✓	10 ⁻¹	193	0	0	0
		194	0	0	0 _v
		195	0	0	0
3 ^v	10 ⁻²	196	4.0/1 ✓		
		197	4.0/1 ✓		
		198	4.0/1 ✓		
10 ⁻³	10 ⁻³	199	4.0/1 ✓		
		200	4.0/1 ✓		
		201	4.0/1 ✓		
- 2wks - 10/18 ✓	10 ⁻¹	202	0	0	0 _v
		203	0	0	0 _v
		204	0	0	0
20 ⁰	10 ⁻²	205	0	0	0 _v
		206	4.0/1 ✓		
		207	0	0	0 _v
10 ⁻³	10 ⁻³	208	4.0/1 ✓		
		209	4.0/1 ✓		
		210	4.0/1 ✓		
- 4wks - 11/1 ✓	10 ⁻¹	211	0	0	0
		212	0	0	0 _v
		213	0 _v	0 _{sup}	
20 ⁰	10 ⁻²	214	0	0	0 _v
		215	4.0/1 ✓		
		216	0	0	0 _v
10 ⁻³	10 ⁻³	217	4.0/1 ✓		
		218	4.0/1 ✓		
		219	4.0/1 ✓		

Type I Poliovirus vs. (hill. Vol. sera, who received Type II P.V., had Type I P. Antibody cont.

Mixtures tested:		Tube No.	2/4	2/8
[Redacted] 8 wks - 11/29 ✓ 320	10^{-1}	220	4	2
		221	0	0
		222	0	0
	10^{-2}	223	0	0
		224	0	0
		225	0	0
	10^{-3}	226	40 ✓	
		227	40 ✓	
		228	40 ✓	
[Redacted] - pre - 10/4/55 ✓ 32	10^{-1}	229	0	0
		230	0	0
		231	0	0
	10^{-2}	232	40 ✓	
		233	40 ✓	
		234	40 ✓	
	10^{-3}	235	40 ✓	
		236	40 ✓	
		237	40 ✓	
- 2 wks - 10/18 ✓ 320	10^{-1}	238	0	0
		239	0	0
		240	0	0
	10^{-2}	241	0	0
		242	0	0
		243	0	0
	10^{-3}	244	40 ✓	
		245	40 ✓	
		246	40 ✓	
- 8 wks - 11/1 ✓ 320	10^{-1}	247	0	0
		248	0	0
		249	0	0
	10^{-2}	250	0	0
		251	0	0
		252	0	0
	10^{-3}	253	40 ✓	
		254	40 ✓	
		255	40 ✓	

error!

Mixture tested:

			Tube No	2/4	2/8
8 wks - 11/29	10 ⁻¹	256	0	0 _v	
		257	0	0 _v	
		258	0	0 _v	
		10 ⁻²	259	0 _v	0 _v
			260	0	0 _v
			261	0 _v	0 _v sp
		10 ⁻³	262	4.0/1 ✓	
			263	4.0/1 ✓	
			264	4.0/1 ✓	
pre - 10/4/55	10 ⁻¹	265	0 _v	0 _v sp	
		266	0	0 _v	
		267	0 _v	0 _v	
	10 ⁻²	268	0-1	4.0/1 ✓	
		269	0	0 _v	
		270	0	0 _v	
	10 ⁻³	271	4.0/1 ✓		
		272	4.0/1 ✓		
		273	4.0/1 ✓		
- 2 wks - 10/18/55	10 ⁻¹	274	0	0 _v	
		275	0 _v	0 _v sp	
		276	0	0 _v	
	10 ⁻²	277	0	0 _v	
		278	0	0 _v	
		279	0	0 _v	
	10 ⁻³	280	4.0/1 ✓		
		281	4.0/1 ✓		
		282	4.0/1 ✓		
- 4 wks - 11/1	10 ⁻¹	283	0 _v	0 _v sp	
		284	0 _v	0 _v sp	
		285	0	0 _v	
	10 ⁻²	286	0 _v	0 _v sp	
		287	0	0 _v	
		288	0	0 _v	
	10 ⁻³	289	4.0/1 ✓		
		290	4.0/1 ✓		
		291	4.0/1 ✓		

320

200

320

320

contin.

Type I Poliovirus v.s. Ch. II. Vol. Ser. who received Type II on 10-4-55 contn.

Mixture tested:

			Tube No.	2/4 4	2/8 8
8 wks - 11/29	10 ⁻¹	✓	292	0 _v	0 _v
			293	0	0 _v
			294	0	0 _v
200	10 ⁻²		295	40/✓	
			296	0	0 _v
			297	0	0 _v
	10 ⁻³		298	40/✓	
			299	40/✓	
			300	40/✓	

STANDARD B & P "NOTEAR"

STANDARD B & P "NOTEAR"

II b.

Effect ^{on level of} Type III ~~Poliovirus~~ ^{Antibody} in Sera of Child. Volunteers who received Type II (Ysk-KP51) attenuated virus on 1-13-55 and had previous natural acquired Type III Polio antibody.

FEB 1 1956

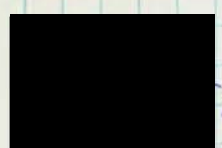
Virus used: Leon KP 36 Lot 2 of 1/4/54 Amp. T in A-4-5
100 TC₅₀ = 0.2 ml. of $10^{-4.6}$ use 1:20000

Procedure: 0.4 ml of 2x indic. conc. of serum } hence at room-temp. 0.2 ml / tube
+ 0.4 ml of virus $10^{-4.3}$

Culture Tubes used: Series T₁₃₂ of 1/24/56 Medium add. 1/30/56 0.5% final serum, pH 8.2.

Mixture tested:

Virus + Hank's



1 wk pre - 1/20/55

32

- 2 wks - 1/27/55

320

Tube No.	215	219
N	4	8
301	40/1 ✓	
302	40/1 ✓	
303	40/1 ✓	
10 ⁻¹ 304	0	0
305	0	0 _v
306	0	0 _v
10 ⁻² 307	40/1 ✓	
308	40/1 ✓	
309	40/1 ✓	
10 ⁻³ 310	40/1 ✓	
311	40/1 ✓	
312	40/1 ✓	
10 ⁻¹ 313	0	0
314	0	0 _v
315	0	0 _v
10 ⁻² 316	0	0 _v
317	0	0 _v
318	0	0
10 ⁻³ 319	40/1 ✓	
320	40/1 ✓	
321	40/1 ✓	

over!

Mixture tested:

[Redacted]

- 4 wks - 2/10/55

320

[Redacted]

8 wks - 3/10/55

200

[Redacted]

pre - 1/13/55

60

- 2 wks - 1/27/55

320

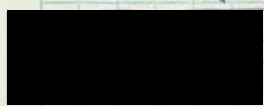
	Tube No	2/5 4	2/9 8	
10 ⁻¹	322	0	0	
	323	0	0	
	324	0 cont.	0	
	10 ⁻²	325	0	0
		326	0	0
		327	0	0
	10 ⁻³	328	40/	
		329	40/	
		330	40/	
10 ⁻¹	331	0	0	
	332	0	0	
	333	0	0	
10 ⁻²	334	0	0	
	335	40/	0	
	336	0	0	
10 ⁻³	337	40/		
	338	40/		
	339	40/		
10 ⁻¹	340	0-1	40/	
	341	40/	0	
	342	0		
10 ⁻²	343	40/		
	344	40/		
	345	40/		
10 ⁻³	346	40/		
	347	40/		
	348	40/		
10 ⁻¹	349	0	0	
	350	0	0	
	351	0	0	
10 ⁻²	352	0	0	
	353	0	0	
	354	0	0	
10 ⁻³	355	40/		
	356	40/		
	357	40/		

Contn.

Type III Poliovirus vs. Chik. Virus of Type I Exp. of 1-13-55 contin.

FEB 1 1956

Mixture tested:



4 wks - 2/10/55

Tube No	2/5	2/4
358	4	8
359	0	0
360	0	0
361	0	0
362	0	0
363	40	40
364	40	40
365	40	40
366	40	40

200

- 8 wks - 3/10/55

367	0	0
368	0	0
369	0	0
370	40	40
371	40	40
372	0	40
373	40	40
374	40	40
375	40	40

32

pre - 1/13/55

376	0	0
377	0	0
378	0	0
379	40	40
380	40	40
381	40	40
382	40	40
383	40	40
384	40	40

32

- 2 wks - 1/27/55

385	0 alk.	alk.
386	0	0
387	0	0
388	0-1	40
389	0-1	40
390	40	40
391	40	40
392	40	40
393	40	40

32

over!

Mixture tested:



- 4 wks - 2/10/55

32

	Tube No	2/5	
10^{-1}	394	0	
	395	0	
	396	0	
10^{-2}	397	40	✓
	398	40	✓
	399	40	✓
10^{-3}	400	40	✓
	401	40	✓
	402	40	✓

2/9
8
0
0
0

- 8 wks - 3/10/55

32

	Tube No	2/5	
10^{-1}	403	0	
	404	0	
	405	0	
10^{-2}	406	40	✓
	407	40	✓
	408	40	✓
10^{-3}	409	40	✓
	410	40	✓
	411	40	✓

0
0
0
0_{vip.}

FEB 1 1956

II b

Effect of Type III Poliovirus on Sera of Child Volunteers who received Type II (P 712) Poliovirus on 10-4-55 and had previous natural acquired Type III Polioantibody

Virus used: Leon KP 36, Lot 2 of 11/4/54 Amp. I in A-4-5
100 TCID₅₀ = 0.2 ml of 10^{-6.6} mc 1: 20000

Procedure: 0.4 ml of 2x indic. conc. of serum } 1 hour at room-temp.
+ 0.4 ml of virus 10^{-4.3} } 0.2 ml/tube

Culture Tubes used: Series T₁₃₂ of 11/4/56 Medium added 1/20/56
0.5% final serum pH 8.2.

Mixture tested:

Virus + Hanker



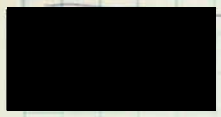
	Tube No	2/5	2/9
	N	4	8
	301	40/1 ✓	
	302	40/1 ✓	
	303	40/1 ✓	
pre- 10/4/55	10 ⁻¹		
	412	0	0
	413	0	0
	414	0	0 ✓
32	10 ⁻²		
	415	40/1 ✓	
	416	3-4	40/1 ✓
	417	40/1 ✓	
	10 ⁻³		
	418	40/1 ✓	
	419	40/1 ✓	
	420	40/1 ✓	
- 2 wks - 10/18	10 ⁻¹		
	421	0	0
	422	0	0 ✓
	423	0	0
200	10 ⁻²		
	424	0 ✓	0 ✓
	425	0	0
	426	0	40/1 ✓
	10 ⁻³		
	427	40/1 ✓	
	428	40/1 ✓	
	429	40/1 ✓	
- 4 wks - 11/1	10 ⁻¹		
	430	0	0 ✓
	431	0	0 ✓
320	432	0	0 ✓
	10 ⁻²		
	433	0	0 ✓
	434	0	0 ✓
	435	0	0

STANDARD B & P "NOTEAR"

STANDARD B & P "NOTEAR"

only

Mixture tested:

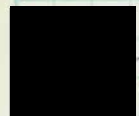


- 4 wks - contin- 10^{-3} Tube No. 2/5 2/9
 \overline{N} 4 8
 436 2-3 off ✓
 437 2-3 off ✓
 438 4-4 ✓

- 8 wks - 11/29/55 10^{-1} 439 0 0
 440 0 0
 441 0 0

200 10^{-2} 442 0 0
 443 0 0
 444 0 4. ✓

10^{-3} 445 4-4 ✓
 446 4-4 ✓
 447 4-4 ✓



- pre - 10/4/55 10^{-1} 448 0 ✓ 0 ✓
 449 0 ✓ 0 ✓
 450 0 ✓ 0 ✓

32 10^{-2} 451 4-4 ✓
 452 4-4 ✓
 453 2-4 off ✓

10^{-3} 454 4-4 ✓
 455 4-4 ✓
 456 4-4 ✓

- 2 wks - 10/18 10^{-1} 457 0 0
 458 0 0
 459 0 0 ✓

32 10^{-2} 460 4-4 ✓
 461 4-4 ✓
 462 4-4 ✓

10^{-3} 463 4-4 ✓
 464 4-4 ✓
 465 4-4 ✓

- 4 wks - 11/1 10^{-1} 466 0 0 ✓
 467 0 0 ✓
 468 0 0 ✓

32 10^{-2} 469 3-4 off ✓
 470 1-2 off ✓
 471 2-3 off ✓

10^{-3} 472 4-4 ✓
 473 4-4 ✓
 474 4-4 ✓

Type III Poliovirus v.s. Child-Vol sera of Type II Exp. of 1/13/55 make

Mixture tested:

FEB 1 1956

[Redacted]

- 8 wks - 11/29

	Tube Nr	2/5
	N	4
10^{-1}	475	0
	476	0
	477	0

8
0
0
0

32

10^{-2}	478	4.0/✓
	479	0/✓
	480	4.0/✓

4.0/✓

10^{-3}	481	4.0/✓
	482	4.0/✓
	483	4.0/✓

[Redacted]

- pre - 10/4/55

10^{-1}	484	0
	485	0
	486	0

0
0
0

200

10^{-2}	487	0
	488	0
	489	2-3

0
0
0/✓

10^{-3}	490	0-2
	491	2-3
	492	4.0/✓

4.0/✓
0/✓

- 2 wks - 10/18

10^{-1}	493	0
	494	0
	495	0

0
0
0

200

10^{-2}	496	0
	497	0
	498	0

0
0
4.0/✓

10^{-3}	499	4.0/✓
	500	4.0/✓
	501	4.0/✓

- 4 wks - 11/1

10^{-1}	502	0
	503	0
	504	0

0
0
0

320

10^{-2}	505	0
	506	0
	507	0

0
0
0

10^{-3}	508	4.0/✓
	509	4.0/✓
	510	4.0/✓

over!

Mixture tested:

[Redacted]

- 8 wks - 11/29

320

Tube No	2/5	2/9
10^{-1} 511	4	8
512	0	0 _v
513	0	0 _v
10^{-2} 514	0	0 _v
515	0	0 _v
516	0	0 _v
10^{-3} 517	4.0 ✓	
518	4.0 ✓	
519	0-1	off ✓

[Redacted]

- 10/4/55

32 or C

10^{-1} 520	1-2	off ✓
521	2-3	off ✓
522	4.0 ✓	
10^{-2} 523	4.0 ✓	
524	4.0 ✓	
525	4.0 ✓	
10^{-3} 526	4.0 ✓	
527	4.0 ✓	
528	4.0 ✓	

- 2 wks - 10/12/55

64

10^{-1} 529	0 _v	0 _v p
530	0	0 _v
531	0	0
10^{-2} 532	0	0 _v
533	4.0 ✓	
534	0	0 _v
10^{-3} 535	4.0 ✓	
536	4.0 ✓	
537	4.0 ✓	

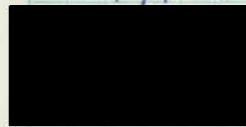
- 4 wks - 11/1

32

10^{-1} 538	0	0 _v
539	0	0 _v
540	0	0 _v
10^{-2} 541	4.0 ✓	
542	4.0 ✓	
543	4.0 ✓	
10^{-3} 544	4.0 ✓	
545	4.0 ✓	
546	4.0 ✓	

Type III Polio virus v.v. chill. Vol. Sera of Type II Eggs of 1/13/55 cont.

Mixture tested:



8 wks - 11/29

10^{-1}

Tube No
547
548
549

2/5
4
0
0

8
0
0
0

FEB 1 1956

32

10^{-2}

550
551
552

4.1 ✓
4.0 ✓
4.0 ✓

10^{-3}

553
554
555

4.1 ✓
4.0 ✓
4.0 ✓

(2c)

Effect of
Test for Heterotypic Type I Polio Antibody
Response
in Human Volunteers, who received Type I on 1/27/55
and Type 2 (Ysk) on 4/21/55.

Virus used: Mahoney KP 35, Lot 4 of 1/4/54; Amp. 4 in A-4-2
100 TCID₅₀ = 0.2 ml of 10^{-4.3} u.c. i: 10000

Procedure: 0.4 ml of 2x indic. conc. of serum } 1 hour at
+ 0.4 ml of virus 10⁻⁴ } room temp.
0.2 ml / tube

Culture Tubes used: Series T137 of 2/14/55; Medium
added 2/20/55; 0.5% final serum; pH 8.2

<u>Mixture tested:</u>	Tube No	2/25	2/29
Virus + Hanks	148	4	8
	149	4	
	150	4	



Pne - 4/21/55	10 ⁻¹	151	0	0v
		152	0	0v
		153	0	0

320	10 ⁻²	154	0	0v
		155	0m	0m
		156	0	0

10 ⁻³	157	4	
	158	4	
	159	3-4	4

- 2wk - 5/5	10 ⁻²	160	0	0v
		161	0	0v
		162	0	0v

3200	10 ⁻³	163	0	0v
		164	0	0v
		165	0	0p

10 ⁻⁴	166	4	
	167	4	
	168	4	

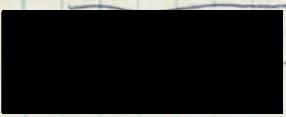
- 4wk - 5/19	10 ⁻²	169	0	0v
		170	0	0
		171	0	0

over!

STANDARD B & P "NOTEAR"

B & P "NOTEAR"

Mixture tested:



- 4wk - contin.

3200

Tube No.	7/25	7/29
172	4	8
173	0	0v
174	0	0v

175	4/10	
176	4/10	
177	4/10	

- 8wk - 6/16

6400

178	0	0v
179	0	0v
180	0	0v

181	0	0v
182	4/10	
183	4/10	

184	4/10	
185	4/10	
186	4/10	

- pre - 4/21/55

32

187	0	0v
188	0	0v
189	0	0v

190	4/10	
191	4/10	
192	4/10	

- 2wk - 5/5

200

193	0	0v
194	0	0v
195	0	0v

196	0	4/10
197	0	0v
198	0	0v

199	4/10	
200	4/10	
201	4/10	

202	4/10	
203	4/10 mold	
204	4/10 mold	

- 4wk - 5/19

200

205	0	0v
206	0	0v
207	0 m	0m

208	0	0v
209	0	0
210	0-2	4/10

Heterotyp. Type I Polio anti. to Type 2 (4wk) contin.

FEB 21 1956

Mixture tested:

		Tube No	7/5	2/29
- 4wk - contin.	10 ⁻³	211	4/5	8
		212	4/5	
		213	4/5	
	10 ⁻⁴	214	4/5	
		215	4/5	
		216	4/5	
- 8wk - 6/16	10 ⁻¹	217	0	0
		218	0	0
		219	0	0
	10 ⁻²	220	4/5	
		221	0	0
		222	0	4/5
10 ⁻³	223	4/5		
	224	4/5		
	225	4/5		
10 ⁻⁴	226	4/5		
	227	4/5		
	228	4/5		
Richard - 12 wks - see ends of book!				
- Pre - 4/21/55	1:2	229	0	0
		230	0	0
		231	0	0
	10 ⁻¹	232	4/5	
		233	4/5	
		234	4/5	
- 2wk - 5/5	1:2	235	0	0
		236	0	0
		237	0	0
	10 ⁻¹	238	0	4/5
		239	4/5	
		240	4/5	
10 ⁻²	241	4/5		
	242	4/5		
	243	4/5		
10 ⁻³	244	4/5		
	245	4/5		
	246	4/5		

6.4

4

4

over!

Mixture tested:



- 4wk - 5/19

32

	Tube No.	2/5	4/29
1:2	247	4	0
	248	0	0
	249	0	0
10 ⁻¹	250	0	0
	251	0	0
	252	0	0
10 ⁻²	253	4/1	
	254	4/1	
	255	4/1	
10 ⁻³	256	4/1	
	257	4/1	
	258	4/1	

- 8wk - 6/16

64

1:2	259	0	0
	260	0	0
	261	0	0
10 ⁻¹	262	0	0
	263	0	0
	264	0	0
10 ⁻²	265	0	0
	266	4/1	
	267	4/1	
10 ⁻³	268	4/1	
	269	4/1	
	270	4/1	



- 12wks - 7/14/55

Previous test
on this serum
yielded 1:200

10 ⁻¹	271	0	0
	272	0	0
	273	0	0
10 ⁻²	274	4/1	
	275	4/1	
	276	4/1	
10 ⁻³	277	4/1	
	278	4/1	
	279	4/1	
10 ⁻⁴	280	4/1	
	281	4/1	
	282	4/1	

Test for Heterotypic Type III Polio-Antibody response in Human Volunteer, who ^{had} received Type 3 Polio

{ - Leon on 1/13/55 / to Type II ([redacted] YSK on 4/21/55
 - Leon t.m. 1/17/55 / [redacted] P712 on 10/4/55 }

Virus used: Leon KP 36, Lot 2 of 1/4/54, Anyp. I in A-4, 100 TC₅₀ = 0.2 ml of 10^{-4.6} t.c. 1: 20000

Procedure: 0.4 ml of 2X indic. conc. of serum) 1 hour at room temp.
 + 0.4 ml of virus 10^{-4.3} 0.2 ml / tube

Culture Tubes used: Series T₁₃₅-A of 2/1/56; Medium added 2/8/56 pH 8.2.

<u>Mixture tested:</u>	Tube No	2/24	2/28
Virus + Hanks	1	4/	8
	2	4/	
	3	4/	
[redacted] - pre - 4/21	1:2	0	0
	.50	0	0
	.51	0	0
4	10 ⁻¹	4/	
	.52	4/	
	.53	4/	
	.54	4/	
- 2wk - 5/5	1:2	0	0
	.54	0 ✓	0 ✓
	.57	0	0
20	10 ⁻¹	0	0 ✓
	.58	1-2	4/
	.59	0	0 ✓
	.60	0	
	10 ⁻²	4/	
	.61	4/	
	.62	4/	
	.63	4/	
	10 ⁻³	4/	
	.64	4/	
	.65	4/	
	.66	4/	
- 4wk - 5/19	1:2	0	0
	.67	0	0 ✓
	.68	0	0 ✓
	.69	0 ✓	0 ✓
200	10 ⁻¹	0	0
	.70	0	0 ✓
	.71	0	0 ✓
	.72	0	0

over!

Mixture tested:

- 4wks - contin. - 10^{-2}

Tube No

2nd

2nd

- 73
- 74
- 75

~~4~~
~~4~~
~~0~~
~~4~~

8
0v

10^{-3}

- 76
- 77
- 78

~~4~~
~~4~~
~~4~~

- 8wks - 6/16

1:2

- 79
- 80
- 81

0
0
0

0v
0
0

3v

10^{-1}

- 82
- 83
- 84

0
0
0

0
0
0

10^{-2}

- 85
- 86
- 87

~~4~~
~~4~~
~~4~~

10^{-3}

- 88
- 89
- 90

~~4~~
~~4~~
~~4~~

- 12wks - 7/14

10^{-1}

- 91
- 92
- 93

0
0
0

0
0
0

3v

10^{-2}

- 94
- 95
- 96

~~4~~
~~4~~
~~4~~

10^{-3}

- 97
- 98
- 99

~~4~~
~~4~~
~~4~~

10^{-4}

- 100
- 101
- 102

~~4~~
~~4~~
~~4~~

- pre - 10/4/05

10^{-1}

- 103
- 104
- 105

0
0
0

0
0v
0v

3v

10^{-2}

- 106
- 107
- 108

~~4~~
~~4~~
~~4~~

10^{-3}

- 109
- 110
- 111

~~4~~
~~4~~
~~4~~

Heterotyp. Type III Antibody resp. to type II. contn.

FEB 20 1956

Mixture tested:

[Redacted]

- 2wk - 10/12

320

Tube No.	%H	%K
10^{-1} .112	4	4
.113	0	0
.114	0	0
10^{-2} .115	0	0
.116	0	0
.117	0	0
10^{-3} .118	4	
.119	4	
.120	4	
10^{-4} .121	4	
.122	4	
.123	4	

- 4wk - 11/1

64

10^{-1} .124	0	0
.125	4	
.126	0	0
10^{-2} .127	4	
.128	0	0
.129	0	0
10^{-3} .130	4	
.131	4	
.132	4	
10^{-4} .133	4	
.134	4	
.135	4	

- 8wk - 11/29

200

10^{-1} .136	0	0
.137	0	0
.138	0	0
10^{-2} .139	0	0
.140	12	4
.141	0	0
10^{-3} .142	4	
.143	4	
.144	4	
10^{-4} .145	4	
.146	4	
.147	4	

(2)

Test for Heterotypic Type I Polio-Antibody in Human Volunteer [redacted], who had received Type I on 4/21/55 to feeding of Type II (P712) on 10/4/55.

Virus used:

Procedure:

Culture Tubes used:

} Same as in other Type I
Neutr. test of same date

Mixture tested:

Virus + Hanks

[redacted]

Serum tested 7/14/55

titer of 1:320

3200 or over

- 2wk - 10/18

3200 or over

Tube No	2/25	2/29
N 148	4	8
149	4	
150	4	
283	0	0
284	0	0
285	0	0
286	0	0
287	0	0
288	0	0
289	0	0
290	0	0
291	0	0
292	0	0
293	0	0
294	0	0
295	0	0
296	0	0
297	0	0
298	0	0
299	0	0
300	0	0

Over!

Mixture tested:

[Redacted]

4wk- 11/1 -

6400.

	Tube No	2/24	2/29
10 ⁻²	301	0	0
	302	0	0
	303	0	0
10 ⁻³	304	0	0
	305	0	0
	306	0	0
10 ⁻⁴	307	12	411
	308	0	0
	309	46	

- 8wk- 11/29

6400

10 ⁻²	310	0	0
	311	0	0
	312	0	0
10 ⁻³	313	0	0
	314	0	0
	315	0	0
10 ⁻⁴	316	48	0
	317	0	
	318	48	

Heterotypic Type I antibody response in childlike volunteer who had "experimentally" acquired Type I antibody [feeding of Type I ([redacted] on 4/21/55)] prior to receiving Type II ("P712") attenuated poliovirus on 10/4/55;

Culture tubes: T142 3/2/56. Medium added 3/8/56 ptt-L
 Virus used: Mahoney kP35. Lot 4 of 1/4/54. Amp 4 in 17-4-2.
 100 TCD50 = 0/2 ml. of 10^{-4.3}; use 1:10,000.

Procedure: 0/4 ml. of 2x indic. serum conc. / 1 hr. at room temp
 + 0/4 ml. of virus, 10⁻⁴ / 0/2 ml. per tube.

Culture tubes used:
 Virus + Hanks

		Tube No.	3/12	3/21
		N, 1	eff	
		2	eff	
		3	eff	
[redacted] ✓ 10/4/55	10 ⁻²	58	0	0
" " " " " " " "		59	0	0
		60	0	0
	10 ⁻³	61	eff	
320		62	eff	
		63	eff	
	10 ⁻⁴	64	eff	
		65	eff	
		66	eff	
	10 ⁻⁵	67	eff	
		68	eff	
		69	eff	
✓ 10/18/55	10 ⁻²	70	0	0
2 wks post "P712"		71	0	0
		72	0	0
	10 ⁻³	73	0	0
3200		74	0	0
		75	0	0
	10 ⁻⁴	76	eff	
		77	eff	
		78	eff	
	10 ⁻⁵	79	eff	
		80	eff	
		81	eff	

medium tested.
11/11/55
4 wks. post "P712"

Take
No.
10-2 82
83
84

3/17
4
0
0
0

3/21
0
0
0

3200

10-3 85
86
87

0
0
0

0
0
0

10-4 88
89
90

eff
eff
eff

10-5 91
92
93

eff
eff
eff

11/29/55
8 wks post "P712"

10-2 94
95
96

0
0
0

0
0
0

2000

10-3 97
98
99

0
eff
0

0
0
0

10-4 100
101
102

eff
eff
eff

10-5 103
104
105

eff
eff
eff

IIc

MAR 12 1955

Heterotypic Type III antibody response in chills of the volunteer who had "experimentally" acquired Type III antibody [feeding of Type III () on 4/7/55] prior to receiving Type II () attenuated virus.

Virus used: Leon KP36. Lot 2 of 1/4/54. Amp I in A-4-5. 100 TC50 = 0.2 ml. of 10^{-4.6}; use 1:20,000.

Procedure 0.4 ml. of 2x indic. serum conc. |, br. at room temp. + 0.4 ml. of virus 10^{-4.3} | 0.2 ml. per tube.

Culture tubes used: Series T142. 3/2/52 medium added 3/2/52 att. 2

Mixtures tested:	Tube No.	3/16	3/10
Virus + Hanks	N 106		
	107		
	108		
[redacted] 10/4/55 ✓	1:2	0	0
	214	0	0
	215	0	0
	216	0	0
b	10 ⁻¹	eff	
	217	eff	
	218	eff	
	219	eff	
	10 ⁻²	eff	
	220	eff	
	221	eff	
	222	eff	
1 wt. 10/11/55 ✓	10 ⁻¹	0	0
	223	0	0
	224	0	0
	225	0	0
3 ✓	10 ⁻²	eff	
	226	eff	
	227	eff	
	228	eff	
	10 ⁻³	eff	
	229	eff	
	230	eff	
	231	eff	

over.

culture tested.

2 wk. 10/18/55 ✓

10-1

Tube No

232
233
234

416
4
0
0
0

3/20
0
0
0

10-2

235
236
237

0
0
0

0
0
0

320

10-3

238
239
240

eff
eff
eff

3 wk. 10/25/55 ✓

10-1

241
242
243

0
0
0

0
0
0

10-2

244
245
246

0
0
0

0
0
0

320

10-3

247
248
249

eff
eff
eff

6 wk. 11/15/55 ✓

10-1

250
251
252

0
0
0

0
0
0

200

10-2

253
254
255

eff
0
0

0
0
0

10-3

256
257
258

eff
eff
eff

II c.

MAR 12 1955

Heterotypic Type III antibody response in chills of the volunteer who had "experimentally" acquired Type III antibody [feeding of Type III (L.Sc.) on 9/13/55] prior to receiving Type II (P 712) attenuated virus on 10/4/55.

Virus used: Leon kP 36. Lot 2 of 1/4/54. Amp I in B-4-5.
100 TC₅₀ = 0.2 ml. of 10^{-4.6}. Use 1:20,000.

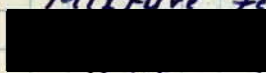
Procedure: 0.4 ml. of 2x indic. serum conc. | 1 hr. at room temp.
+ 0.4 ml. of virus, 10^{-4.3} | 0.2 ml. per tube.

Culture tubes used: Series T 142. 3/2/56. medium added 3/8/56 p.H. 2

inmate tested.	Tube No.	3/16	3/20
Virus + Hanks	N: 106	eff	
	107	eff	
	108	eff	
[redacted] 1/14/55	1:2 160	0	0
	161	0	0
Pre L.Sc.	162	0	0
	163	0	0
	164	0	0
	165	0	0
20?	10 ⁻¹ 166	0	0
	167	eff	
	168	0	0
10/4/55	1:2 169	0	eff
3 wks. post L.Sc.	170	0	0
+ Pre "P 712"	171	0	0
	172	0	0
	173	0	0
	174	0	0
10	10 ⁻¹ 175	0	eff
	176	0	0
	177	0	0

(over)

Mixture tested.



✓ 10/17/55

4 wks. post L.Sc.

1 wks. post "P712"

20

10⁻¹

178
179
180

3/16
4
0
0
0

3/20
9
0
0
0

0
0
488

0
0

✓ 10/18/55

2 wks. post "P712"

5 wks. " L.Sc.

10⁻²

184
185
186

0
0
0

0
0
0

10⁻¹

187
188
189

0
0
0

0
0
0

320

10⁻²

190
191
192

0
0
0

0
0
0

10⁻³

193
194
195

488
488
488

✓ 10/25/55

3 wks. post "P712"

6 " " L.Sc.

10⁻¹

196
197
198

0
0
0

0
0
0

10⁻²

199
200
201

0
0
0

0
0
0

640

10⁻³

202
203
204

488
488
0

0

✓ 11/28/55

8 wks. post "P712"

11 " " L.Sc.

10⁻¹

205
206
207

0
0
0

0
0
0

10⁻²

208
209
210

0
0
488

0
488

64

10⁻³

211
212
213

488
488
488

Heterotypic Antibody Response in Human Volunteers after Injection of Attenuated Poliovirus.

III. Effect of Injection of Type III on antibody vs. Types I + II.

Group: status Name.	Virus Injected	Date	Titer of antibody vs. Type I			Time in weeks after injection.						Titer of antibody vs. Type II							
			2	3	4	6	8	12	12 mo	2	3	4	6	8	12				
None demonstrable	0	3	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Various naturally acquired levels	200	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	
	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	
	20	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	
	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	
	32	2000	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	
	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
	4	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
	200	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320

None demonstrable

Various naturally acquired levels

Various levels from injection

STANDARD B & P "NOTEAR"

Test for Heterotypic Type I Polio Antibody in Human Volunteers, who had no previous Type I Antibody to Type III Polio virus inoculation.

Virus used:

Procedure:

Culture Tubes used:

} same as in other Type I Neutr. test. of same date.

Mixture tested:

	Tube #	2/25	2/29
Virus + Hank's	148	4	8
	149	4	
	150	4	
- 12wk - 4/7/55 1:2	319	0	0
	320	0	0
	321	0	0
	322	0	0
	323	0	0
	324	4	
	325	4	
	326	4	
	327	4	
	328	4	
	329	4	
	330	4	
pre - 4/7/55 1:2	331	4	
	332	4	
	333	4	
- 3wk - 4/28/55 1:2	334	4	
	335	4	
	336	4	
- 4wk - 5/5 1:2	337	4	
	338	4	
	339	4	

STANDARD B & P "NOTEAR"

over!

Mixture tested:



- 6wk - 5/19 - 1:2
 340
 341
 342

7/4
 4
~~4~~
~~4~~
~~4~~
 4
~~4~~
~~4~~
 4

2/29
 8

0

- 8wk - 6/1 - 1:2
 343
 344
 345

0



pre - 4/7/55
 3
 1:2
 346
 347
 348

0
 0
 0

0
 4
 0

- 3wk - 4/28
~~4+2~~
 1:2
 349
 350
 351

0
 0
 0

0
 0
 0

- 4wk - 5/5
~~4+?~~
 1:2
 352
 353
 354

0
 0
 0

0
 0
 0

- 6wk - 5/19
~~4+?~~
 1:2
 355
 356
 357

0
 0
 0

0
 0
 0

- 8wk - 6/1
~~4+?~~
 1:2
 358
 359
 360

0
 0
 0

0
 0
 0

(3a)

Test for Heterotypic Type II Polio-Antibody in Human Volunteers, who had no previous Type II Antibody to Type III Poliovirus inoculation.

Virus used: YSK KP 53, Lot 4 of 1/4/54, Amp. 3 in A-4-2
100 TCD₅₀ = 0.2 ml of 10^{-4.7}; use 1:50000

Procedure: 0.4 ml of 2x indic. conc. of serum } theoretical
+ 0.4 ml of virus 10^{-4.7} } counterexp.
0.2 ml/tube

Culture Tubes used: Series T138 of 2/21/56. medium added 2/27/56 pH 7.2

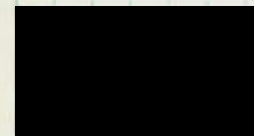
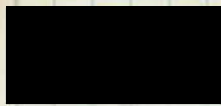
Mixture tested:

		Tube No	3/5	3/9
Virus + Hankes		379	✓	
		380	✓	
		381	✓	
	- Pre - 4/21 -	1:2 382	✓	
		383	✓	
		384	✓	
	- 3wk - 5/12 -	1:2 385	0	0
		386	0	0
		387	0	0
	- 4wk - 5/19	1:2 388	0	0
		389	0	0
		390	0 ✓	
	- 6wk - 6/1	1:2 391	0	0
		392	0	0
		393	0	0
	- 8wk - 6/16	1:2 394	0	0
		395	0	0
		396	0 ✓	
	- Pre - 4/21	1:2 397	✓	
		398	✓	
		399	✓	
	- 3wk - 5/12	1:2 400	0	0
		401	0	0
		402	0	0
	- 4wk - 5/19	1:2 403	0	0
		404	✓	
		405	0	0

Proper dates
Done!
See Book of 1-13-56



Mixture tested:



		Tube no		3/5	3/9
	6wk - 6/1	1:2	406 407 408	0 eff 0	0 0 0
	- 8wk - 6/16	1:2	409 410 411	0 eff eff	0
	Proc - 4/27	1:2	412 413 414	eff eff eff	
0	- 3wk - 4/29	1:2	415 416 417	eff eff eff	
0	- 4wk - 5/5	1:2	418 419 420	eff eff eff	
0	- 6wk - 5/19	1:2	421 422 423	eff eff eff	
0	- 8wk - 6/1	1:2	424 425 426	eff 0 not	3-4 eff.
	- Proc - 4/7	1:2	427 428 429	eff eff eff	
	- 3wk - 4/29	1:2	430 431 432	Dark eff Dark	0 eff
	- 4wk - 5/5	1:2	433 434 435	eff eff eff	
	- 6wk - 5/19	1:2	436 437 438	eff eff eff	
	- 8wk - 6/1	add 1 no. 1:2	439 440 441	eff 0 eff	0

contin.

Mixtures tested:	Tube No.	3/5	4/9	
- 1st - 9/13/55	1:2	442	0	
		443	0	
		444	0	
			cont	0
	4	10 ⁻¹	445	eff
			446	eff
			447	eff
		10 ⁻²	448	eff
			449	eff
			450	eff
	- 2nd - 9/27	1:2	451	0
			452	0
		453	0	
		10 ⁻¹	454	0
			455	0
			456	0
320		10 ⁻²	457	0
			458	0
			459	0
		10 ⁻³	460	0
			461	eff
			462	eff
- 4th - 10/11	1:2	463	0 _M	
		464	0	
		465	cont	
	320	10 ⁻¹	466	0
			467	0 _M
			468	0
		10 ⁻²	469	0
			470	0
			471	0
		10 ⁻³	472	eff
			473	eff
			474	eff

over!

Mixture tested:



6wk - 10/25

320
—

	Tube No.	3/5	2/9
10^2	475	0	0
	476	0	0
	477	0	0
10^1	478	0	0
	479	0	0
	480	0	0
10^0	481	0	0
	482	0	0
	483	0	0
10^{-1}	484	eff	
	485	eff	
	486	eff	

nk.

W b.

FEB 27 1956

Heterotypic response to Type I poliovirus in sera of Chellicotte volunteers who rec'd Type III (Leon) attenuated virus on 1/13/55 and who previously had naturally acquired Type I antibody.

Virus used: Mahoney KP 35 Lot 4 of 1/4/54, Amp. 4 in A-4-2
100 TCID₅₀ = 0.2 ml of 10^{-4.3} use 1:10000

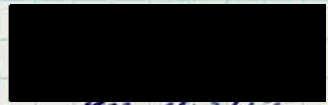
Procedure: 0.4 ml of 2x indic. conc. of serum } House at room temp
+ 0.4 ml of virus 10⁻⁴ } 0.2 ml / tube

Culture tubes used: Series T139B of 2/15/56. Medium added 2/24/56, PH 8.2 (Series with Dist tubes)

Mixture tested. Tube No. N
Virus + Hanka .361
.362
.363

3/2
4
3/6
4

eff
eff
eff



Date	Conc.	Tube No.	Result	Notes
1/13/55	10 ⁻¹	.364 .362 a	0	
		.365 .363 a	0	
		.366 .364	0	
200	10 ⁻²	.367 .365	0	
		.368 .366	0	
		.369 .367	1-2	eff
	10 ⁻³	.370 .368	eff	
		.371 .369	eff	
		.372 .370	eff	
2 wk. 1/22/55	10 ⁻¹	.373 .371	0	
		.374 .372	0	
		.375 .373	0	
320	10 ⁻²	.376 .374	0	
		.377 .375	0	
		.378 .376	0	
	10 ⁻³	.379 .377	eff	
		.380 .378	eff	
		.381 .379	eff	
	10 ⁻⁴	.379a	eff	
		.379b	eff	
		.379c	eff	

(over)

mutants tested:



4 wk 2/10/55

320

Take No	2/2	2/6
10 ⁻¹ .380	0	0
.381	0	0
.382	0	0
10 ⁻² .383	0	0
.384	0	0
.385	0	0

10 ⁻³ .386	4ff	
.387	0	4ff
.388	4ff	

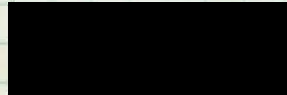
10 ⁻⁴ .388a	4ff
.388b	4ff
.388c	4ff

8 wk 3/10/55

320

10 ⁻¹ .389	0	0
.390	0	0
.391	0	0
10 ⁻² .392	0	0
.393	0	0
.394	0	0

10 ⁻³ .395	4ff	
.396	4ff	
.397	4ff	
10 ⁻⁴ .397a	4ff	
.397b	4ff	
.397c	4ff	



10 wk 1/13/55

320

10 ⁻¹ .398	0	0
.399	0	0
.400	0	0
10 ⁻² .401	0	0
.402	0	0
.403	0	0

10 ⁻³ .404	4ff	
.405	4ff	
.406	4ff	

2 wk 1/27/55

320

10 ⁻¹ .407	0	0
.408	0	0
.409	0	0
10 ⁻² .410	0	0
.411	0	0
.412	0	0

10 ⁻³ .413	4ff	
.414	4ff	
.415	4ff	
10 ⁻⁴ .415a	4ff	
.415b	4ff	
.415c	4ff	

Type I Polio vs. Chilli sera who rec'd. Type III (Leow) on 1/13/55.
 members tested:

Member	Date	Tube no.	10 ⁻¹	10 ⁻²	10 ⁻³	10 ⁻⁴		
[Redacted]	2/10/55	10-1	416	3/2 0	3/6 0			
			417	0	0			
			418	0	0			
	320	10-2	419	0	0			
			420	0	0			
			421	0	0			
		10-3	422	4ff		10-4	424a	4ff
			423	4ff			424b	4ff
			424	4ff			424c	4ff
8 wk. 3/10/55	10-1	425	0	0				
		426	0	0				
		427	0	0				
	640	10-2	428	0	0			
			429	0	0			
			430	0	0			
		10-3	431	4ff		10-4	433a	4ff
			432	3-4	4ff		433b	4ff
			433	0	0		433c	4ff
[Redacted]	10-1	434	0	0				
		435	3-4ff	4ff				
		436	0	0				
	20	10-2	437	4ff				
			438	4ff				
			439	4ff				
		10-3	440	4ff				
			441	4ff				
			442	4ff				
2 wk. 1/22/55	10-1	443	0	0				
		444	0	0				
		445	0	0				
	32	10-2	446	4ff				
			447	4ff				
			448	4ff				
		10-3	449	4ff		10-4	451a	4ff
			450	4ff			451b	4ff
			451	4ff			451c	4ff

over.

Mixture tested:

Tube No.

5/2

3/6



29 wk. 2/10/55 10⁻¹ .452
.453
.454

4

0

0 cont. ✓
0 M

0

0

200

10⁻² .455
.456
.457

4/6

0

0

0

0

10⁻³ .458
.459
.460

4/6

4/6
4/6

10⁻⁴ .460a
.460b
.460c

4/6
4/6
4/6

8 wk. 3/10/55 10⁻¹ .461
.462
.463

0

0

0

0

0

0

200

10⁻² .464
.465
.466

4/6

0

0

0

0

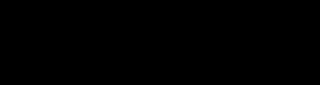
10⁻³ .467
.468
.469

4/6

4/6
4/6

10⁻⁴ .469a
.469b
.469c

4/6
4/6
4/6



Pre 1/13/55 10⁻¹ .470
.471
.472

0

0

0

0

0

0

320

10⁻² .473
.474
.475

0

0

0

0

0

0

10⁻³ .476
.477
.478

4/6

4/6
4/6

2 wk. 1/22/55 10⁻¹ .479
.480
.481

0

0

0

0

0

0

320

10⁻² .482
.483
.484

0

0

0

0

0

0

10⁻³ .485
.486
.487

4/6

1-2

1-2

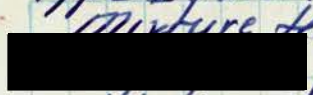
4/6
4/6

10⁻⁴ .487a
.487b
.487c

4/6
4/6
4/6

Cont.

Type I *Polio.* vs. *Chilji* sera who rec'd. Type III (Leon) on 1/13/55
 Mixture tested.



			Type II	3/2	3/6		
4 wk. 2/10/55	10-1	.488	0	0	0		
		.489	0	0	0		
		.490	0	0	0		
	3 20 10-2	.491	0	0	0		
		.492	0	0	0		
		.493	0	0	0		
	10-3	.494	4/6		10-4	.496a	4/6
		.495	4/6			.496b	4/6
		.496	4/6			.496c	4/6
8 wk. 3/10/55	10-1	.497	0	0	0		
		.498	0	0	0		
		.499	0	0	0		
	3 20 10-2	.500	0	0	0		
		.501	0	0	0		
		.502	0	0	0		
	10-3	.503	4/6		10-4	.505a	4/6
		.504	4/6			.505b	4/6
		.505	3-4		4/6	.505c	4/6

Mixtime tested

Tube No.
N

$\frac{3}{4}$
Y

3
 $\frac{3}{P}$
S

4 wk

10-11-55

10^{-1}

25

0

0

26

0_M

0

27

0

0

10^{-2}

28

0

0

29

0_M ✓

0

30

0

0

10^{-3}

31

0_M ✓

32

0

0

33

0_M

0_M

10^{-4}

34

uff

35

uff

36

uff

8 wk 11-8-55

10^{-1}

37

0

0

38

0_M

0_M

39

0_M

0_M

10^{-2}

40

0

0

41

0_M

0_M

42

0

0

10^{-3}

43

0_M

0_M

44

0

0

45

uff

10^{-4}

46

uff

47

uff

48

uff

10^{-1}

49

0

0

50

0

0

51

0

0

10^{-2}

52

0

0

53

0_M

0_M

54

0

0

10^{-3}

55

uff

56

uff

57

uff

2 wk 9-27-55

10^{-1}

58

0

0_M

59

0

0

60

0

0

3200

2000

320

320

Effect of digestion of Type 3 virus (Glenn strain) on level of preexisting naturally acquired Type 1 antibody

Mixture tested		Tube No.		
		IV	3/4	3/4
			✓	✓
2 WK 9-27-55	10 ⁻²	61	0	0
		62	0	0
		63	0	0
	10 ⁻³	64	eff	
		65	eff	
		66	eff	
	10 ⁻⁴	67	eff	
		68	eff	
		69	eff	
4 wk 10-11-55	10 ⁻¹	70	0	0
		71	0	0
		72	0	0
	10 ⁻²	73	0	0
		74	0 _M	0 _M
		75	0	0
	10 ⁻³	76	eff	
		77	eff	
		78	eff	
	10 ⁻⁴	79	eff	
		80	eff	
		81	eff	
8 wk 11-8-55	10 ⁻¹	82	0	0
		83	0	0
		84	0	0
	10 ⁻²	85	0 _M ✓	
		86	0 _M	0 _M
		87	0 _M	0 _M
	10 ⁻³	88	eff	
		89	eff	
		90	eff	
	10 ⁻⁴	91	eff	
		92	eff	
		93	eff	
	10 ⁻¹	94	0	0
Pre 9-14-55		95	0	0
		96	0	0

320

320

320

over

Mxytene tested

Tube NO.

N

3/4

3/8

[Redacted]

10^{-2}

97
98
99

4
4ff
4ff
4ff

8

10^{-3}

100
101
102

4ff
4ff
4ff

12 wk 9-27-55

10^{-1}

103
104
105

0
0
0

0
0
0

10^{-2}

106
107
108

0
0
0

0
0
0

320

10^{-3}

109
110
111

4ff
4ff
4ff

10^{-4}

112
113
114

4ff
4ff
4ff

4 wk 10-11-55

10^{-1}

115
116
117

0
0m
0mk

0
0m
0

10^{-2}

118
119
120

0
0
0

0
0
0

320

10^{-3}

121
122
123

4ff
4ff
4ff

10^{-4}

124
125
126

4ff
4ff
4ff

8 wk 11-8-55

10^{-1}

127
128
129

0
0
0

0
0
0

320

10^{-2}

130
131
132

0m
0
0m

0m
0
0

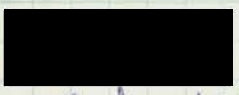
Effect of digestion of Type 3 virus (Glenn strain) on level of preexisting naturally acquired Type 1 antibody

Mixture heated	Tube No	3/4	8/8
8 wk - 11-8-55	10 ³	133 134 135	
	10 ⁻⁴	136 137 138	
	10 ⁻⁷	139 140 141	
Und 0/3 ∴ 4	10 ⁻²	142 143 144	
	10 ⁻³	145 146 147	
	10 ⁻¹	148 149 150	0 0 0
3✓	10 ⁻²	151 152 153	
	10 ⁻³	154 155 156	
	10 ⁻⁴	157 158 159	
4 wks 10-11-55	10 ⁻¹	160 161 162	0 0 0
	10 ⁻²	163 164 165	0 4/4 4/4
	10 ⁻³	166 167 168	4/4 4/4 4/4

over

Mixture tested

Tube NO.



4 wk 10-11-55

10⁻⁴

N
169
170
171

3/4

✓
✓✓
✓✓✓
✓✓✓

3/4

✓
✓

8 wk 11-8-55

10⁻¹

172
173
174

0
0
0

0
0
0

10⁻²

175
176
177

✓✓
✓✓✓
✓✓✓

✓
✓
✓

32

10⁻³

178
179
180

✓✓
✓✓✓
✓✓✓

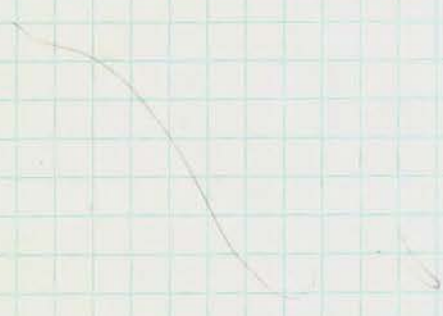
✓
✓
✓

10⁻⁴

181
182
183

✓✓
✓✓
✓✓

✓
✓
✓




30
 Heterotypic response to Type II Poliovirus in sera of
 Chilli volunteers who rec'd Type III (Leon) attenuated
 virus on 1/13/55 and who previously had naturally
 acquired Type II antibody.

Virus used: GSK KP 53 Lot 4 of 1/4/54 Amp. 3 in A-4-2
 100 TC₅₀ = 0.2 ml of 10^{-5} ; use 1:50000

Procedure: 0.4 ml of 2x ind. conc. of serum } 1 hr at
 + 0.4 ml of virus $10^{-4.7}$ } room temp.
 0.2 ml / tube

Culture tubes used: Series T140 2/25/56. Medium
 added 3/5/56. pH 7.2

mixture tested.	Tube No.	3/10	3/11
		<u>4</u>	<u>8</u>
Virus + Hank's	N. 549500		
	549501		
	550502		
			
pre 1/13/55	10^{-1} 551	0	0
	552	0	0
	553	0	0
64	10^{-2} 554	4/4	
	555	4/4	
	556	0	0
	10^{-3} 557	4/4	
	558	4/4	
	559	4/4	
2wk. 1/29/55	10^{-1} 560	0	0
	561	0	0
	562	0	0
200	10^{-2} 563	4/4	
	564	0	0
	565	0	0
	10^{-3} 566	4/4	
	567	4/4	
	568	4/4	
	10^{-4} 569		4/4
	570		4/4
	571		4/4

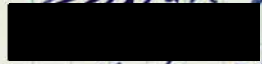
members listed.	Tude No	3/10	3/14
[redacted]		4	8
4 wk. 2/10/55	10-1	572	0
		573	0
		574	0
	10-2	575	0
		576	0
		577	0
2000	10-3	578	0
		579	0
		580	eff
8 wk 3/10/55	10-1	581	0
		585	0
		586	0
640	10-2	587	0
		588	0
		589	0
	10-3	590	eff
		591	eff
[redacted]		592	0
Pre 1/13/55	10-1	593	0
		599	0
		598	0
2000	10-2	599	0
		600	0
		601	0
	10-3	602	eff
		603	0
		604	0
2 wk. 1/27/55	10-1	605	0
		606	0
		607	0
640	10-2	608	0
		609	0
		610	0
	10-3	611	0
		612	eff
		613	eff

10-4 581 eff
582 eff
583 eff

10-4 593 eff
594 eff
595 eff

10-4 614 eff
615 eff
616 eff

Mixture tested:



4 wk. 2/10/55

T ₁	T ₂	9/10	9/11
10 ⁻¹	.617	0	0
	.618	0	0
	.619	0	0

3200

10 ⁻²	.620	0	0
	.621	0	0
	.622	0	0

10 ⁻³	.623	0	0	10 ⁻⁴	.626	4th
	.624	0	0		.627	4th
	.625	0	0		.628	4th

8 wk. 3/10/55

10 ⁻¹	.629	0	0
	.630	0	0
	.631	0	0

3200

10 ⁻²	.632	0	0
	.633	0	0
	.634	0	0

10 ⁻³	.635	0	0	10 ⁻⁴	.638	4th
	.636	0	0		.639	4th
	.637	0	0		.640	4th



1 yr 1/13/55

10 ⁻¹	.641	0	0
	.642	0	0
	.643	0	0

320

10 ⁻²	.644	0	0
	.645	4th	0
	.646	0	0

10 ⁻³	.647	4th	0
	.648	4th	0
	.649	0	0

2 wk. 1/27/55

10 ⁻¹	.650	0	0
	.651	0	0
	.652	0	0

640

10 ⁻²	.653	0	0
	.654	4th	0
	.655	0	0

10 ⁻³	.656	4th	0	10 ⁻⁴	.659	4th
	.657	0	0		.660	4th
	.658	4th	0		.661	0

██████████

4 wk. 2/10/55

~~2000~~
320

Tube No	710 y	714 r	% y	flp r
10-1 662	0	0		
663	0	0		
664	0 _{ink}	0		
10-2 665	0	0		
666	0	0		
667	0	0		
10-3 668	eff			
669	eff			
670	eff			
10-4 671			eff	
672			0	0
673			0	0

8 wk. 3/10/55

320

10-1 674	0	0		
675	0	0		
676	0	0		
10-2 677	0	0		
678	0 _{ink}	0		
679	eff			

██████████

PrL 1/13/55

32

10-3 680	eff			
681	eff			
682	eff			
10-4 683			0	0
684			eff	
685			eff	

2 wk. 1/22/55

2000

10-1 686	0	0		
687	0	0		
688	0	0		
10-2 689	eff			
690	eff			
691	eff			
10-3 692	eff			
693	eff			
694	eff			
10-1 695	0	0		
696	0	0		
697	0	0		
10-2 698	0	0		
699	0	0		
700	0	0		
10-3 701	0			
702	0			
703	eff			
10-4 704			eff	
705			eff	
706			eff	

cont.

MAR 8 - 1956

Type IV PV. vs. ahilli who rec'd Type III (beon) on 1/13/55
numbers tested: ^{July} ₁₉₅₅

[Redacted]

4 wk. 2/10/55

10-1 207
208
209

3/16

0
0
0

3/14

0
0
0

10-2 210
211
212

0
0
0

0
0
0

320

10-3 213
214
215

4ff
4ff
4ff

10-4 216
217
218

4ff
4ff
4ff

8 wk. 3/10/55

10-1 219
220
221

0
0
0

0
0
0

640

10-2 222
223
224

0
0
0

0
0
0

10-3 225
226
227

1
0
4ff

4ff 10-4 228
0 229
230

4ff
4ff
4ff

STANDARD B & P "NOTEAR"

STANDARD B & P "NOTEAR"

MAR 1 1956

Ingestion of Type 3 Virus (6 MAR 1 1956)

Effect of Type II Poliovirus on sera of chilli volunteers on level of Preexisting Naturally Acquired Type 2 Antibody who rec'd Type III (Glenn) attenuated virus on 9/13/55 and who previously had naturally acquired Type II polio antibody.

Virus used: YSK KP 53 Lot 4 of 1/4/54, Amp. 3 in A-4-2
100 TLD₅₀ = 0.2 ml of 10⁻⁵; use 1:50000

Procedure: 0.4 ml of 2x indic. conc. of serum (1 hr. at 37°C) + 0.4 ml of virus 10^{-4.7} (0.2 ml/tube)

Culture tubes used: 0.4 ml of 2x indic. conc. of serum + 0.4 ml Denis T138 of 2-21-56 med added 2-27-56. PH 8.2

Mixture tested	Tube No.	3/5	3/9	3/6	3/9
Hanks + virus	N	✓	✓		
	184	✓			
	185	✓			
	186	✓			
TC 9/13/55 10 ^{-1, 2, 3}	10 ⁻¹ 187	0	0		
	188	0	0M		
	189	conf			
320	10 ⁻² 190	0	0		
	191	0	0		
	192	conf			
10 ⁻³	193	✓			
	194	✓			
	195	✓			
2wk 9/29/55 10 ^{-2, 3, 4, 5}	10 ⁻¹ 196	0 conf ✓			
	197	0	0		
	198	0 conf ✓			
3200?	10 ⁻² 199	0	0		
	200	0 conf ✓			
	201	0	0		
10 ⁻³	202	0 conf ✓			
	203	✓			
	204	0			
10 ⁻⁴	205	0	0	✓	
	206	0	0	0M	0
	207	0	0	conf ✓	

mixture tested.

take
no.

3/5

3/9

3/5 3/9
4 5

4 wk. 10/11/55

10⁻¹

208
209
210

0
0
0

0
0
0

10⁻² 2, 3, 4, 5

10⁻²

211
212
213

0
count
0

0
0
0

10,000?

10⁻³

214
215
216

0
0_m
0

0
0
0

10⁻⁴

217
218
219

4ft
0
count

8 wk. 11/4/55

10⁻¹

220
221
222

0
0
0

0
0
0

10⁻² 2, 3, 4, 5

10⁻²

223
224
225

0
0
count

0
0
0

20,000

10⁻³

226
227
228

0
count
count

0
0
0

10⁻⁴

229
230
231

4ft
0
0

10c. 9/13/55

10⁻¹

232
233
234

0
0
count

0
0
0

11, 2, 3

10⁻²

235
236
237

0
0
4ft

0
0
0

200

10⁻³

238
239
240

4ft
4ft
4ft

2 wk. 9/29/55

10⁻¹

241
242
243

0
0
0

0
0
0

2, 3, 4

10⁻²

244
245
246

count
0_m
0_m

0_m
0_m

3, 20 or 640

10⁻³

247
248
249

4ft
count
4ft

10⁻⁴

250
251
252

0
4ft
4ft

cont.

Type II Polio. vs. chilli sera who rec'd Type III (Glen) on 9/13/55
 mixture tested. 3/5 3/9 3/5 3/9

4 wk. 10/11/55
 1, 2, 3

10 ⁻¹	253	0	0
	254	0	0M
	255	0	0
10 ⁻²	256	0	0
	257	0	0
	258	0M	0M

320

10 ⁻³	259	cont	
	260	eff	
	261	eff	

10 ⁻⁴	262	eff
	263	eff
	264	eff

8 wk. 11/8/55
 1, 2, 3

10 ⁻¹	265	0	0
	266	0	0
	267	0	0
10 ⁻²	268	cont	
	269	0M	0M
	270	cont	

320 or less

10 ⁻³	271	eff	
	272	eff	
	273	eff	

10 ⁻⁴	274	eff
	275	eff
	276	eff

11/13/55
 1, 2, 3

10 ⁻¹	277	cont	
	278 <td>0</td> <td>0</td>	0	0
	279	cont	

320 or less

10 ⁻²	280	cont	
	281 <td>0</td> <td>0</td>	0	0
	282	cont	

10 ⁻³	283	eff	
	284	eff	
	285	eff	

2 wk. 9/27/55
 1, 2, 3

10 ⁻¹	286	0	0
	287 <td>0M</td> <td>0M</td>	0M	0M
	288 <td>0</td> <td>0</td>	0	0

320 or less

10 ⁻²	289	0	0
	290	cont	
	291	cont	

10 ⁻³	292	0	eff
	293	eff	
	294	eff	

10 ⁻⁴	295	eff
	296	eff
	297	cont

(over)

in.ature tested.

Tube no. 2/5 3/9

3/5 3/9

9 wk 10/11/55

21314

10-1 298 0 0
299 0 0
300 cont.

3200 or +

10-2 301 Om ✓
302 Om ✓
303 cont ✓

10-3 304 0 0
305 0 0
306 Om Om

10-4 307 uft
308 cont ✓
309 cont ✓

8 wk. 11/8/55

21314

10-1 310 cont ✓
311 Om ✓
312 cont ✓

3200 or +

10-2 313 0 0
314 0 0
315 0 0

10-3 316 0 0
317 Om Om
318 cont. Om

10-4 319 uft
320 uft
321 uft

Pre 9/13/55

11213

<320

10-1 322 Om Om
323 Om Om
324 0 0

10-2 325 uft
326 0
327 cont ✓

10-3 328 uft
329 uft
330 uft

2 wk. 9/27/55

11213

320

10-1 331 0 0
332 0 0
333 0 0

10-2 334 cont ✓
335 0 0
336 0 0

10-3 337 uft
338 0 uft
339 uft

10-4 340 uft
341 cont ✓
342 cont ✓

(cont)

Type II Polio vs. Chilli sera who rec'd Type III (Glenn) on 9/13/55
 mixture tested: rate 3/5 1/9 3/5 3/9

[Redacted]

4 wk. 10/11/55

11213

10⁻¹ . 343 0 0
 . 344 0 0
 . 345 conf

10⁻² . 346 conf
 . 347 0 0
 . 348 0 0

320 or +

10⁻³ . 349 vlt
 . 350 conf
 . 351 conf

10⁻⁴ . 352 vlt
 . 353 vlt
 . 354 vlt

8 wk. 11/8/55

11213

10⁻¹ . 355 0 0
 . 356 0 0_M
 . 357 0 0

320 or +

10⁻² . 358 0 0_M
 . 359 0 0_M
 . 360 0 0

10⁻³ . 361 conf
 . 362 vlt
 . 363 vlt

10⁻⁴ . 364 vlt
 . 365 conf
 . 366 vlt

MAR 14 1956

III b. Repeat

Heterotypic Type II antibody response in chilled the volunteers who had naturally acquired Type II antibody prior to receiving Type III (Glenn) attenuated poliovirus:

Virus used: V54 KP 53 Lot 4 of 1/4/54; Amp 3 mB-4-2. 100 TCD₅₀ = 0/2 ml. of 10⁻⁵; use 1:50,000.

Procedure: 0/4 ml. of 2x indic. serum conc. / 1 hr. at room temp. + 0/4 ml. of virus 10^{-4.7} / 0/2 ml. per tube.

Culture tubes used:

Mixture tested:		Tube No.	3/1	3/2
Virus + Hanks		11, 259	eff	
		260	eff	
		261	eff	
[redacted] pre 9/18/55	10 ⁻¹	313	0	0
		314	0/1k	0
		315	0/1k	0
3 ²⁰	10 ⁻²	316	0	0
		317	0	0
		318	0	0
	10 ⁻³	319	eff	
		320	eff	
		321	eff	
2 wh. 9/27/55	10 ⁻²	322	0	0
		323	0	0
		324	0	0
2000	10 ⁻³	325	0	0
		326	eff	
		327	0	0
	10 ⁻⁴	328	eff	
		329	eff	
		330	eff	
	10 ⁻⁵	331	eff	
		332	eff	
		333	eff	

over

STANDARD B & P "NOISEAR"

STANDARD B & P "NOISEAR"

Mature tested:
1 wk. 10/11/55

July

3/18

3/22

Nu.

10-2 334
335
336

4
0
0
0

4
0
0
0

320

10-3 337
338
339

eff
eff
eff

10-4 340
341
342

eff
eff
eff

10-5 343
344
345

eff
eff
eff

8 wk. 11/8/55

10-2 346
347
348

0
0
0

0
0
0

2000

10-3 349
350
351

eff
0
0

0
0
0

10-4 352
353
354

eff
eff
eff

10-5 355
356
357

eff
eff
eff

14c 9/18/55

10-1 358
359
360

0
0
0

0
0
0

32

10-2 361
362
363

eff
eff
eff

10-3 364
365
366

eff
eff
eff

2 wk. 9/27/55

10-2 367
368
369

0
0
eff

0
0
0

200

10-3 370
371
372

eff
eff
eff

cont.

Heterotypic II response to α (Glenn) feeding. $\frac{3}{4}$ -

mixture tested:
2 wk. 9/27/55

742
10-4 373
374
375

4
4
4

4 wk. 10/11/55

10-1 376
377
378

0
0
0

64

10-2 379
380
381

0
4
4

10-3 382
383
384

4
4
4

8 wk. 11/8/55

10-1 385
386
387

0
0
0

32

10-2 388
389
390

4
4
4

10-3 391
392
393

4
4
4

pre 9/15/55

10-1 394
395
396

0
0
0

64

10-2 397
398
399

4
0
4

10-3 400
401
402

4
4
4

2 wk. 9/27/55

10-1 403
404
405

0
0
0

320

10-2 406
407
408

0
0
0

10-3 409
410
411

4
4
4

over.

Mixture tested:
4 wk. 10/11/55

Tube No.	3/4	3/2
10-2 . 412	0	0
. 413	0	0
. 414	0	0

520

10-3 . 415	eff	
. 416	eff	
. 417	eff	

10-4 . 418	eff	
. 419	eff	
. 420	eff	

8 wk. 11/8/55

10-2 . 421	0	0
. 422	0	0
. 423	0	0

640

10-3 . 424	0	eff
. 425	eff	
. 426	0	0

10-4 . 427	eff	
. 428	eff	
. 429	eff	

Pre 9/14/55

10-1 . 430	0	0
. 431	0	0
. 432	0	0

52

10-2 . 433	eff	
. 434	eff	
. 435	eff	

10-3 . 436	eff	
. 437	eff	
. 438	eff	

2 wk. 9/27/55

10-1 . 439	0	0
. 440	0	0
. 441	0	0

520

10-2 . 442	0	0
. 443	0	0
. 444	0	0

10-3 . 445	eff	
. 446	eff	
. 447	eff	

cont.

Heterotypic Type II response to Type III (Glenn) feeding.

Mixture tested:

MAR 14 1958

		Tube No	3/1	3/2
4 wk. 10/11/55	320	10-1 448	0	0
		449	0	0
		450	0	0
	320	10-2 451	0	0
		452	0	0
		453	0	0
		10-3 454	eff	
		455	eff	
		456	eff	
8 wk. 11/8/55	320	10-1 457	0	0
		458	0	0
		459	0	0
	320	10-2 460	0	0
		461	0	0
		462	0	0
		10-3 463	eff	
		464	eff	
		465	eff	

Heterotypic Type I ab. response in Chilocotte volunteer who had naturally acquired Type I antibody previous to receiving Type III attenuated poliovirus.

Virus used: Mahoney K.P.35. Lot 4 of 1/4/57. Amp 4 in A-4-2
 $100 \text{ TCD}_{50} = 0.2 \text{ ml. of } 10^{-4.3}$. Use 1:10,000.

Procedure 0/4 ml. of ex indic. serum conc. / 1 hr. at room temp
 + 0/4 ml. virus 10^{-4} / 0/2 ml. per tube.

Culture tubes used: Series T142 3/2/56 medium added
 3/8/56. pH 7.2

Mixture tested:		Tube No.	3/17	3/18
Virus + Hank's	N	1	eff	
		2	eff	
		3	eff	
[redacted] Proc 4/7/55	1:2	4	eff	
		5	eff	
		6	0	0
TR	10^{-1}	7	eff	
		8	eff	
		9	eff	
3 wk. 4/28/55	1:2	10	0	0
		11	eff	
		12	eff	
TR	10^{-1}	13	eff	
		14	eff	
		15	eff	
4 wk. 5/5/55	1:2	16	0	0
		17	0	0
		18	0	0
20	10^{-1}	19	eff	
		20	0	0
		21	0	0

35

Test for Heterotypic Type II Polio-antibody response in Child Human Volunteer, who received Type II (YSK) on 1/10/55 to feeding of Polio Type III (Leon) on 4/7/55.

Virus used: YSK KP 53 Lot 4 of 1/4/54, Amp. 3 in A-4-2
 100 TCD₅₀ = 0.2 ml of 10⁻⁵ pure 1: 50000

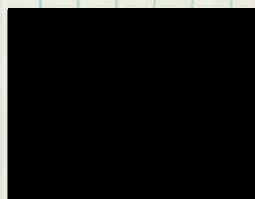
Procedures: 0.4 ml of 2x indic. conc. of serum } 1 hour at room temp.
 + 0.4 ml of virus 10^{-4.7} } 0.2 ml / tube

Culture Tubes used: Series T 140 2/28/55. medium added 3/5/56 pH 7.2

Mixture tested:

Tube No.	3/10	3/11
----------	------	------

Virus + planks



	N	500	eff	
		501	eff	
		502	eff	
- pnc - 4/7	10 ⁻¹	503	0	0
		504	0	0
		505	0	0
3200 or greater	10 ⁻²	506	0	0
		507	0	0
		508	0	0
	10 ⁻³	509	0	0
		510	0	0
		511	0	0
- 3wk - 4/28	10 ⁻¹	512	0	0
		513	0	0
		514	0	0
	10 ⁻²	515	0	0
		516	0	0
		517	0	0
2000	10 ⁻³	518	0	0
		519	eff	
		520	0	0
	10 ⁻⁴	521	eff	
		522	1	eff
		523	eff	

STANDARD B & P "NOTEAR"

NOTEAR

Mixture tested:



4wks - 5/5

2000

- 6wk - 5/19

640

	Tube #	3/10	3/14	
10 ⁻¹	524	0	0	
	525	0	0	
	526	0	0	
	10 ⁻²	527	0	0
		528	0	0
		529	0	0
	10 ⁻³	530	0	0
		531	4ff	
		532	4ff	
10 ⁻⁴	533	4ff		
	534	4ff		
	535	0	0	
10 ⁻¹	536	0	0	
	537	0	0	
	538	0	0	
10 ⁻²	539	0	0	
	540	0	0	
	541	0	0	
10 ⁻³	542	4ff		
	543	4ff		
	544	4ff		
10 ⁻⁴	545	0	0	
	546	0	4ff	
	547	4ff		

3c.

Heterotypic Type II antibody response in chills the volunteer who had previously injected Type II attenuated poliovirus on and who received Type III attenuated poliovirus on .

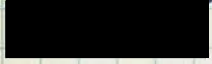
Virus used: VSk KP 53. Lot 4 of 1/1/54. Amp. 3 in 19-4-2.
100 TCD₅₀ = 0.2 ml. of 10⁻⁵. Use 1:50,000.

Procedure: 0.4 ml. of 2x indic. serum conc. / 1 hr. at room temp.
+ 0.4 ml. of virus 10^{-4.7} / 0.2 ml. per tube.

Culture tubes used: Series T141 of 3/1/56. Medium added 3/7/56. pH 8.2

Mixture tested:	Tube No	3/18	3/12
Virus + Hanks	N. 259	✓	✓
	260	✓	
	261	✓	
Pre 4/7/55	10 ⁻¹ 262	0	0
	263	0	0
	264	0	0
200			
	10 ⁻² 265	✓	
	266	0	0
	267	0	0
2 wk. 4/24/55	10 ⁻¹ 268	0	0
	269	0	0
	270	0	0
200			
	10 ⁻² 271	✓	
	272	0	0
	273	0	0
	10 ⁻³ 274	✓	
	275	✓	
	276	✓	
3 wk. 4/28/55	10 ⁻¹ 277	0	0
	278	0	0
320	279	0	0
	10 ⁻² 280	0	0
	281	0	0
	282	0	0

mutants tested:



3 wk 4/24/55

Time	Tube No.	Tube #
10-3		283
		284
		285

Time	Tube No.	Tube #
10-3		✓
		✓
		✓

Time	Tube No.	Tube #
10-3		0
		0
		0

4 wk. 5/5/55

10-1	286
	287
	288

10-1	0
	0
	0

10-1	0
	0
	0

10-2	289
	290
	291

10-2	0
	0
	0

10-2	0
	0
	0

320

10-3	292
	293
	294

10-3	✓
	✓
	✓

6 wk. 5/19/55

10-1	295
	296
	297

10-1	0
	0
	0

10-1	0
	0
	0

10-2	298
	299
	300

10-2	0
	0
	0

10-2	0
	0
	0

320

10-3	301
	302
	303

10-3	✓
	✓
	✓

12 wk. 6/30/55

10-1	304
	305
	306

10-1	0
	0
	0

10-1	0
	0
	0

320

10-2	307
	308
	309

10-2	0
	0
	0

10-2	0
	0
	0

10-3	310
	311
	312

10-3	✓
	✓
	✓

Type I antibody response in chillocotha volunteer who received Type I (L.S.C) attenuated poliovirus on 8/13/55.

Virus used: Mahoney K1P35. Lot 4 of 11/4/54. Amp 4 in 17-4-2. 100 TCD50 = 0.12 ml. of 10^{-4.2} dsc 1:10,000.

Procedure: 0.14 ml. of 2x indic serum conc. / 1 hr. at room temp. + 0.14 ml. of virus 10⁻⁴ / 0.12 ml. per tube.

Culture tubes used: series TIV2. 3/2/56. medium added 3/8/56. pH 8.2

Mixture tested:	Tube no.	3/7	3/1
Virus + tanks.	N 1	eff	
	2	eff	
	3	eff	



3 wk.	10/4/55 ✓	1:2	34	0	0
			35	0	0
			36	0	0

<u>6</u>		10 ⁻¹	37	eff	
			38	eff	
			39	eff	

4 wk.	10/11/55 ✓	1:2	40	0	0
			41	0	0
			42	0	0

<u>6</u>		10 ⁻¹	43	eff	
			44	eff	
			45	eff	

6 wk.	10/25/55 ✓	1:2	46	0	0
			47	0	0
			48	0	0

<u>6</u>		10 ⁻¹	49	eff	
			50	eff	
			51	eff	

8 wk.	11/8/55 ✓	1:2	52		
	Not enough serum.		53		
			54		

<u>6</u>		10 ⁻¹	55	eff	
			56	eff	
			57	eff	

MAR 1 - 1956

Test for Type 2 Polio Antibody in 13 Month Serum of PEELING - Chillicothe Group of 1-13-55

Serum specimen - obtained 2-28-56 - arrived
here by air mail special delivery
2-29-56

Virus Used: YSK KP~~33~~ Lot 4 of 1-4-54, Amp 3 in A-4-2
100 TCD₅₀ = 0.2 ml of 10⁵; use 1:50000

Procedure: 0.4 ml of 2x midic cone of serum + 0.4 ml of virus 10^{-4.7}; 1 hr at room temp, 0.2 ml/tube

Tiss Cult. Tubes: Series T138 of 2-21-56. Medium added 2-27-56.
PH 8.2

<u>Material Tested</u>	<u>Tube NO</u>	<u>s/s-</u>	<u>s/A</u>
	<u>N</u>		
<u>Controls</u>			
virus + Host	184	eff	
	185	eff	
	186	eff	
[REDACTED] 10 ⁻¹	.367	0ack	0
	.368	0	0
	.369	0	0
2/28/56 10 ⁻²	.370	0v	0
	.371	0	0
	.372	0v	0
10 ⁻³	.373	eff	
	.374	eff	
	.375	eff	
10 ⁻⁴	.376	eff	
	.377	eff	
	.378	eff	

MAR 12 1958

Determination of antibody vs. Type III poliovirus in serum collected 1 yr. (2/3/56) after inoculation of child of the volunteer (Sullivan) with attenuated Type III poliovirus.

Virus: Leon KP36 Lot 2 of 1/4/54. Amp E in A-45.
 100 TCD₅₀ = 0/2 ml. of 10^{-4.6}, use 1:20,000
 10 TCD₅₀ = 0/2 ml. of 10^{-5.6}, use 1:2,000.00

Procedure: 0/4 ml. of 2x indic. serum conc. | 1 hr. at room temp.
 + a) 0/4 ml. of virus 10^{-4.3} | 0/2 ml. per tube.
 b) 0/4 ml. of virus 10^{-5.8}

Culture tubes used: Series T42. 3/2/56. medium added 3/11/56 pH 7.2

Mixture added.	Tube #	3/16	3/20
Virus-10 ^{-4.6} + Hanks	N .106 .107 .108	4 eff eff eff	8
Virus 10 ^{-5.6} + Hanks	.109 .110 .111	0 0 0	0 0 0
[redacted] 2/3/56 Virus-10 ^{-4.6} (100 TCD ₅₀) 1:2	.112 .113 .114 .115 .116 .117 .118 .119 .120	eff 0 eff 3-eff 1-eff eff eff 0 0	0 eff
[redacted] 2/3/56 Virus-10 ^{-5.6} (10 TCD ₅₀) 1:2	.121 .122 .123	0 0 0	0 0 0
" 1/13/55 1:2	.124 .125 .126	0 0 0	0 0 0