

Feb 1947.

Active Cross-Immunity Tests.

in Convalescent Monkeys.

ACTIVE
CROSS-
IMMUNITY
TESTS

Active Cross-Immunity Tests

Substrate	Antigen	Antibody	Reaction	Result
3M7	1/2	1/2	1/2	1/2
1/2	1/4	1/4	1/4	1/4
1/4	1/8	1/8	1/8	1/8
1/8	1/16	1/16	1/16	1/16
1/16	1/32	1/32	1/32	1/32
1/32	1/64	1/64	1/64	1/64
1/64	1/128	1/128	1/128	1/128
1/128	1/256	1/256	1/256	1/256
1/256	1/512	1/512	1/512	1/512
1/512	1/1024	1/1024	1/1024	1/1024
1/1024	1/2048	1/2048	1/2048	1/2048
1/2048	1/4096	1/4096	1/4096	1/4096
1/4096	1/8192	1/8192	1/8192	1/8192
1/8192	1/16384	1/16384	1/16384	1/16384
1/16384	1/32768	1/32768	1/32768	1/32768
1/32768	1/65536	1/65536	1/65536	1/65536
1/65536	1/131072	1/131072	1/131072	1/131072
1/131072	1/262144	1/262144	1/262144	1/262144
1/262144	1/524288	1/524288	1/524288	1/524288
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(POLIO-1948)
Convalescence Immunity of Diverse Strains
Challenged with MV virus.

DEC 6 1948

The following monkeys convalescent from a given strain of poli^o virus, and having remained unaffected by one or more other strains, as listed below, were all inoculated intracerebrally with 1.0 cc of 1:50 MV virus.

MK#	Original Strain	Additional Strains Resisted	Extent of Paralysis when Challenged	Result with MV virus.
654	[REDACTED]	[REDACTED]	Part. par. all 4; uppers > lowers. Climbs a little; sits up; head, neck face OK. face red.	Par. of back + neck. Extension of par. in uppers on 13 day. - Sacrificed.
685	[REDACTED]	"	Comp. par. both lowers; almost c.p. rt. upper; part. par. of left upper; Head, neck, eyes, face OK.	Par. of back - 8 th day.
254	[REDACTED]	[REDACTED]	Comp. par. both lowers; uppers OK.	P.P. uppers; head drop 5 th day.
699	[REDACTED]	[REDACTED]	C. par. h. lower; part. par. of rt. lower. Weakness of rt. upper	Flaccid paralysis - wk. left upper on 8 th day.
631	[REDACTED]	[REDACTED]	Part. par. both lowers R & L. uppers OK.	Part. par. rt. upper - 8 th day.
1931	[REDACTED]	"	Comp. par. both lowers; almost comp. par. Rt. upper; part. par. Left upper.	
388	[REDACTED]	[REDACTED]	NONE.	7 th day: p.p. both lowers and rt. upper.

Control Monkey - Rh. 943X [REDACTED] [REDACTED]
 1.0 cc 1:50 MV virus ICB

DAY.	TEMP.
0	102.5 ✓
1	102.2 ✓
2	101.9 ✓
3	98.8
4	
5	

8.12-9-48 8:30 A.M. sitting up but very pathetic
 9:30 A.M. T=98.8 prostrate; mouse no ^{limbs on} examination. Does not appear alert; no diarrhea; appears moribund.

AUTOPSY: No gross str
TISSUE FOR SECTION 2 medulla cervical
 Thoracic and lumbar cord (z.A.)

HISTOLOGY: Very extensive acute early neurophagia, with marked cuffing; medulla shows no spared areas.

DIAGNOSIS: POLIO (acute)

#	HOMOLOGOUS	HETEROLOGOUS T HOPRINS	#	HOMOLOGOUS	HETEROLOGOUS T HETPRINS	#	HOMOLOGOUS	HETEROLOGOUS T HOPRINS	#	HOMOLOGOUS	HETEROLOGOUS T HOPRINS
572	OK ₂₈	OK ₂₈	224	D ₁₃	-	1931	OK ₃₀	-	631	OK ₃₀	-
573	OK ₂₈	OK ₂₈	254	OK ₃₀	✓ OK ₃₀	1931	OK ₃₀	✓ (D ₃)	631	OK ₃₀	✓
577	OK ₂₈	OK ₂₈	266	OK ₃₀	✓ OK ₃₀	1931	OK ₃₀	✓	631	OK ₃₀	✓
578	OK ₂₈	OK ₂₈	693	D ₃₂	-	1931	OK ₃₀	✓	631	OK ₃₀	✓
583	OK ₂₈	OK ₂₈	699	OK ₃₀	✓	1931	OK ₃₀	✓	631	OK ₃₀	✓
595	D ₅	-									
600	OK ₂₈	OK ₂₈									

#	HOMOLOGOUS	HETEROLOGOUS T HOPRINS	#	HOMOLOGOUS	HETEROLOGOUS T HETPRINS	#	HOMOLOGOUS	HETEROLOGOUS T HOPRINS
480	D ₂		654	OK ₃₀	✓	631	OK ₃₀	✓
482	OK ₃₀	✓ D ₆	682	OK ₃₀	✓	1931	OK ₃₀	✓
498	News Pan 21 D ₅₈		685	OK ₃₀	✓	1931	OK ₃₀	✓