

SV 40 prep.

BSC-1 or CV-1 or 1^o Monkey kidney
(some claim higher yield = MK, but expensive)
BSC-1 develop resistance \in 1^o passage.
Earnest uses oldest stock, grows + freezes most of it.
From Sabini. Will test Flow lab. line.
Can get ATCC line.
Passage at high cell density in lar. EM \approx 10% calf ser.
— can use basal EM. ($1 \rightarrow 5$ in passage)
3 stocks in culture & then go back to freezer

100 large plates, \bar{c} 10^6 cells/plate
needed
6 days growth or just \bar{c} confluence.
Remove medium + repl. \bar{c} fresh med. cont. 2%
calf ser + stock virus (3×10^8 dil 1:1000).
i.e. 3×10^5 , in maint. med. i.e. moi = $\approx 1/20$
Can use moi $\approx 1/10,000$ (Yoshiiki
Sug. to use very low multiplicity to avoid defectives.)
Maintain cultures until full CPE (f. 7d. —
complete in $\approx 10-12$ d. dep on moi). Controls can
do well in ^{this} med. for 3 days.

Freeze + thaw 3x - entire cells + med.
This is crude stock. Should be $1-5 \times 10^8$ pfu/ml
Store at -20° - quite stable.
Plaque assay BSC-1
V Ag assay - Ab f. Flow labs.

SV40 labile at 37° - $1/2$ time of a 2 days. (PV \approx 7 days)

To conc. virus, pellet crude lysate 30,000 rpm
 $\times 2$ hrs + refrigerated.

DOC 1% final
Trypsin .01% final

750 ml crude lysate

3500 rpm 2½ hrs. - MSE

5 ml super left in each tube + pellet scraped into it (45 ml)
sonicated 3 min. Overnight 4°

Homog by hand to break up clumps

45 ml

+ 2.25 ml 0.25% trypsin

+ 2.25 ml 10% DOC (final 0.5%)

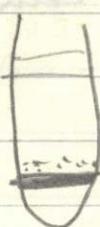
37° - 30'

Servall 10,000 rpm - 30'

Super at 30,000 rpm 2½ hrs.

Drained + 5 ml CsCl pH 7.9 $\rho = 1.304$
into each of 2 tubes 3' cent to clarify

Homog by hand + brought to 12 ml in CsCl soln.
SW 39 32K 19½ hrs



Reulag.

Yield: 90 plates \rightarrow 740 µg

Strain here is a) 777 - greater tend. to stick to cell debris

Others: b) 776 - virus release better.

c) Koch's str.

d) Small pl mutant - Takemoto at NIH