

PRODUCTION OF RETROVIRAL SUPERNATANT USING PACKAGING CELL LINES

Francesco Marangoni October 11, 2011

A few recommendations to get a very nice titer.

MATERIALS

DMEM 10% FCS

Puromycin

Blasticidin

METHOD

1. Culture Platinum-E-based packaging cell lines in DMEM 10%FCS supplemented with 1 μ g/ml Puromycin and 10 μ g/ml Blasticidin (to ensure selection of virion-producing cells). Also ensure the cell line is 100% positive for the reporter gene.
2. Seed 18x10⁶ cells per 15cm Petri dish in DMEM 10%FCS (ABSOLUTELY NO PURO/BLASTI FROM THIS STAGE ON, otherwise your supernatant will kill target cells!!).
3. Let cells grow to confluence (1-2 days).
4. When confluent, put 11ml of DMEM 10%FCS, let it to be conditioned for 24 hours, clarify supernatant by centrifugation, to spin down contaminant dead cells, and then use it on target cells and/or freeze it down.
5. Repeat step 4 for as many days you want. Usually cells resist 5 days before dying.