

Mouse Myeloma Cell Line

myeloma - tumor of cell that originates in bone marrow

rapid cell division
acclimated to tissue culture conditions (cell line)

tissue culture medium used

Dulbecco's Modified Eagle's Medium (DMEM)
with glucose supplement
10-15% serum supplement (growth factors,
nutrients)

fetal bovine (best and most
expensive)
newborn calf (less expensive, but
doesn't work with our cell line)
calf (OK for most of the routine
culturing of our cell line)

antibiotics & antimycotics

5% CO₂, 37°C, humidity

suspension culture (non-adherent)
generally forms irregular clumps of cells
cells will look almost spherical
"cobblestone" appearance of cells that form monolayers directly on
flask surface

Myeloma cell line used in this course

P3x63,Ag8.653 mouse myeloma cell ([ATCC CRL-1580](#))

originally isolated from Balb/c mouse ([myelomas
from BALB/c mice](#))

actually originated from a B-lymphocyte tumor

lost ability to secrete any antibodies (non-secretor)

very "compatible" with normal mouse B-lymphocytes from a
Balb/c mouse

fusion of P3x63 nucleus + normal Balb/c B-lymphocyte nucleus is
almost
like doubling of chromosomes during normal mitosis

