

MEI Protocol

Passage and Maintenance of N19 and N20.1 Cells

Proofed by Yanmei Tao

Two cell lines, N19 and N20.1, are immortal oligodendrocytes received from Dr. Anthony Camagnoni, UCLA, on October 30, 2003. Preservation and maintenance of the cell lines are described below.

Culture Media: Ham's F-12/DMEM (high glucose, 3151mg/L) 50/50, Irvine Cat. 9438; Cellgro, Cat. 10090
Dextrose anhydr. (Fisher Scientific, Cat. BP350-1) 1.80g
Sodium bicarbonate (Fisher Scientific, Cat. S233-500) 1.08g
HEPES (Fisher Scientific, Cat. BP310-1) 1.69g
Gentamicin (Gemini, Cat. 400-100 or Omega Scientific, Cat. GT-3) 45mg
Total Volume 450 ml, pH 7.3-7.4
Filter through a 0.2mm filter
Incubation: 34°C in 5% CO₂

Note: N19 cells grow faster and must passage at 1:3 (T-25 to T-75) or 1:6 (T-25 to T-25) while N20.1, a slow growing cell line, needs passage at 1:1 (T-25 to T-75) or 1:2 (T-25 to T-25).

Preservation: Preservation media is FBS:DMSO, 9:1