

How to culture MDS-LGF cell line

MDS-LGF cells grow without addition of IL-3, but proliferate more slowly than MDS-L or MDS-L-2007. MDS-LGF cells retain a responsiveness to IL-3, and so the addition of IL-3 to the initial medium will be preferable when we restart the culture of MDS-LGF from the frozen state.

I usually add 50 microM 2-mercaptoethanol in 10%FCS/RPMI1640 culture medium (but 2-mercaptoethanol seems not to be essential).

I keep the cell concentration about within 1×10^5 and 5×10^5 cells/mL. To do so, I usually exchange three-quarters or four-fifths of the medium twice a week, but the cell growth seems to depend considerably on FCS lots.

So, please try several FCS lots, and choose the best one.

The cell culture sometimes contains a considerable amount of small debris or particles of unknown origin (from the cells?). We should not mistake them for bacterial contamination.

I use 10%DMSO/40%FCS/50%RPMI medium for a freezing solution of the cells. $1-2 \times 10^6$ cells per cryotube are preferable.

Information of the materials for cell culture:

RPMI1640

Wako Pure Chemical Industries

Code No.189-02025

FCS

Fetal Bovine Serum (Sigma), final 8 to 10% of the whole medium

L-glutamine (final concentration: 2 mM)

Nacalai tesque Inc.

Code No.16948-04

penicillin G/streptomycin (ordinary use)

Nacalai tesque Inc.

Code No.26253-84