

## How to culture MDS-L and MDS-L-2007 cell lines

Both MDS-L and MDS-L-2007 cells are IL-3-dependent (10 to 20 ng/ml IL-3).

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  $1 \times 10^5$  and  $5 \times 10^5$  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 and sometimes on the lot of IL-3 (although it is a human recombinant protein).

So, please try several FCS and IL-3 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

recombinant human IL-3 (50 microgram)

Peprtech

Code No.200-03

Lot No:021213-1

→ 5 microgram/mL in the FCS-containing medium as a stock solution at -20 °C

→ 20 microL is newly added to 5-10 mL culture flask at every time of medium exchange → final IL-3 concentration: 10 to 20 ng/mL

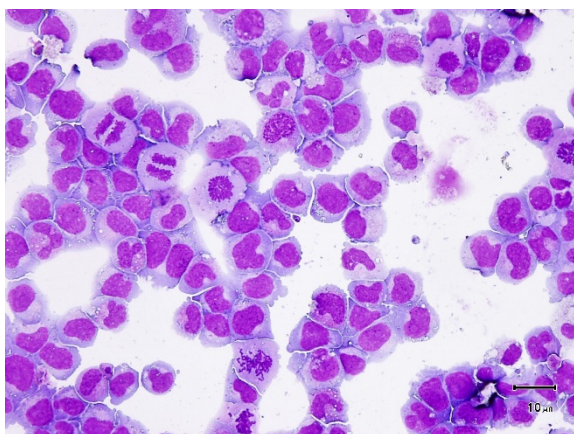
L-glutamine (final concentration: 2 mM)

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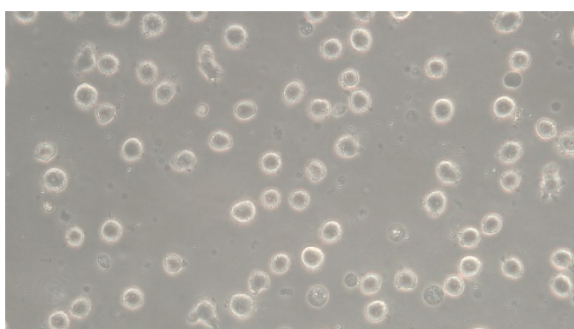
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penicillin G/streptomycin (ordinary use)

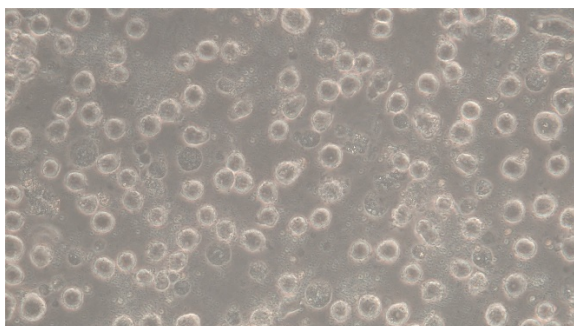
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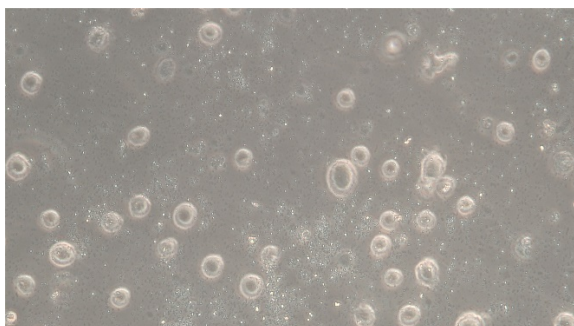
MDS-Lのサイトスピン・メイギムザ染色画像  
(MDS-L-2007とMDS-LGFは形態学的にはほぼ同様の細胞)



MDS-L-順調



MDS-L-微粒子出現



MDS-L-微粒子底面付着