Certificate of Analysis

Mouse (ICR) Inactivated Embryonic Feeder Cells

Product No. S1052001
Lot No. 120924L01
Date of Manufacture 24Sep2012

Viability

Cells are assayed for viability after thaw by trypan blue staining.
Specification: Cells must exhibit ≥ 80% viability.

Sterility

Bacterial and Fungal Contamination: Samples are incubated in blood agar plates, thioglycolate broth, tryptocase soy broth, and Sabouraud Dextrose Agar.
Specification: No growth must be observed.

Mycoplasma: Samples are tested for mycoplasma contamination using a PCR−based assay.
Specification: No mycoplasma contaminants must be detected.

Verification of Growth Arrest:

Cells are assayed for after cryopreservation and confirmed to be mitotically inactive by plating cells at low density and monitoring for cell growth (i.e. formation of foci) for 14 days.
Specification: Results must indicate no growth of cells has occurred.

Ability to Support ESC Growth:

Cells are assayed for their ability to support growth of mouse and human embryonic stem cells (ESC). The cells will be used to culture mouse and human ESC for three passages, after which the ESC will be immunostained to confirm that cells remain undifferentiated. Immunostaining will be performed using fluorescence−conjugated antibodies specific to Oct4, SSEA−1, Nanog, SSEA−3, and SSEA−4.
Specification:
−−For mouse ESC, results must indicate that ≥ 90% of colonies in the plate, and > 90% of cells in each colony are positive for Oct4, SSEA−1, and Nanog, while ≤ 5% of colonies in the plate, and < 5% of cells in each colony are positive for SSEA−3 and SSEA−4.
−−For human ESC, results must indicate that ≥ 90% of colonies in the plate, and > 90% of cells in each colony are positive for Oct4, SSEA−3, SSEA−4, and Nanog, while ≤ 5% of colonies in the plate, and < 5% of cells in each colony are positive for SSEA−1.

Results
Meets all specifications

For Research Use Only. Not for use in diagnostic procedures. If you have any further questions about this Certificate of Analysis, please contact Technical Services at 1−800−955−6288 (US and Canada) or 1−760−603−7200, x2 (all other countries).

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