Neomycin-Resistant Mouse Embryonic Fibroblasts, Day E13.5

For generating neomycin-resistant feeder layers for the culture and selection of transfected undifferentiated ES or iPS cells

Catalog #00323 3 x 10^6 cells

STEMCELL™ TECHNOLOGIES
Scientists Helping Scientists™ | WWW.STEMCELL.COM
TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM
FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Product Description

Neomycin-Resistant Mouse Embryonic Fibroblasts (MEF) can be used as feeder cells for the maintenance of mouse embryonic stem (ES) cells and induced pluripotent stem (iPS) cells in the undifferentiated state while under selection for a neomycin-resistance marker that has been successfully incorporated into the ES or iPS cells. The MEF are resistant to at least 200 µg/mL G418 (Catalog #03812). The cells must be mitotically inactivated by irradiation or mitomycin C treatment prior to forming feeder layers.

Neomycin-resistant MEF are prepared from day E13.5 post-coitus mouse embryos, obtained from female mice (B6D2F1, B6SJLF1, or C3FeB6F1) crossed with transgenic C57BL/6-TgN (pPGKneobpA) mice containing the neomycin-resistance gene.

Each vial contains 3 x 10^6 cells in 1 mL (95% fetal bovine serum and 5% dimethyl sulfoxide).

Stability and Storage

Product stable at -135°C or colder for 6 months from date of receipt. Short-term storage of cells (< 1 month) at -80°C is acceptable, but should be minimized to ensure maximum viability. Thawed samples must be used immediately.

Precautions

Storage of frozen cell products in the vapor phase of a liquid nitrogen storage tank is recommended. Storage in the liquid phase can result in cross-contamination if the vial breaks or is not sealed properly. Storage in the liquid phase also increases the potential for liquid nitrogen to penetrate the vial and cause it to explode when removed from storage. Use of a face shield is required as a safety precaution when transferring cells from one container to another. When handling this product do not use sharps such as needles and syringes.

STEMCELL cannot guarantee the biological function or any other properties associated with performance of cells in a researcher's individual assay or culture systems. STEMCELL assures the cells will meet the specifications only when assessed immediately after thawing (before washing) by our test methods.

Handling / Directions for Use

For directions for use, refer to the Technical Manual: In Vitro Hematopoietic Differentiation of Mouse ES & iPS Cells Using ES-Cult™ (Document #28415) available at www.stemcell.com or contact us to request a copy.

All procedures should be carried out using sterile technique in a certified biological safety cabinet.

MEF are supplied at passage 1 and can be expanded and used up to passage 5. Slow growth and a 'stringy' appearance are signs of senescence. MEF can be expanded, mitotically inactivated, and then frozen. Inactivated MEF can be used as feeder cells one day after thawing and plating.