



Applied StemCell, Inc.

(866) 497-4180

www.appliedstemcell.com

Datasheet

Mouse Embryonic Stem Cell (BALBc-EZ)

Order information

Catalog Number	Quantity
ASE-9008	2.5 x 10 ⁶ cells/ vial

Product Information

Description	Pluripotent, BALB/c-EZ, mouse ES cells were derived at the Institute of Molecular Medicine, University of Texas-Houston in the Transgenic and Stem Cells Core Laboratory. For the production of chimeric mice, the BALB/c-EZ ES cells are routinely microinjected into C57BL/6 mouse blastocysts.
Source	Embryonic stem (ES) cell line derived from the inner cell mass of BALB/cJ mouse blastocysts (mice from: JAX Lab # 000651)
Gender	Male
Passage	P11 (lower passages are also available)
Karyotype	40, XY; (analyzed using the GTW banding method; metaphases counted: 20, euploid: 19, random chromosome loss: 1)
Pathogen Testing	Negative for mycoplasma (tested by PCR Amplification Test)
Chimera Generation	100% success rate
Germline Transmission	100% success rate for gene targeting (passage 12)
Cell Culture	Cultured on mitotically-inactivated mouse embryonic fibroblast (MEF) feeder layer cells, in the presence of 1000 U/mL ESGRO Leukemia Inhibitory Factor (LIF)
Growth rate	Cells split every 2 days, at 1:3 ratio
Cryopreservation	Frozen in 1 mL freezing medium (90% FBS and 10% DMSO)
Shipping	Dry ice
Storage and Stability	Store in liquid nitrogen freezer immediately upon receipt. This product is stable for at least 6 months from the date of receiving when stored as directed.
Safety Precaution	PLEASE READ BEFORE HANDLING ANY FROZEN VIALS. Please wear the appropriate Personal Protection Equipment (lab coat, thermal gloves, safety goggles and a face shield) when handling the cells. Handle the frozen vials with due caution. Please be aware that the following scenario can occur: Liquid nitrogen can leak into

Applied StemCell, Inc.

521 Cottonwood Dr. #111, Milpitas, CA 95035

Phone: 866-497-4180 (US Toll Free); 408-773-8007 Fax: 408-773-8238

info@appliedstemcell.com www.appliedstemcell.com

Copyright 2018, Applied StemCell, Inc. All rights reserved. This information is subject to change without notice.
Product or product derivatives are not intended for resale or redistribution. Product is intended for sole use by the purchasing party.

PROTOCOL

the vials when the vials are submerged in liquid nitrogen. Upon thawing, the liquid nitrogen returns to the gas phase, resulting in a dangerous build-up of pressure within the vial. This can result in the vial exploding and expelling not only the vial contents but also the vial cap and plastic fragments of the vial.

Restricted Use	This product is for research use only and not intended for human or animal diagnostic or therapeutic uses.
-----------------------	--

Media and Materials

MEF Culture Media

Media Components	Vendor	Catalog#	Amount
ESC-Sure™ Basal Medium Mouse DMEM	Applied StemCell	ASM-5001	
ESC-sure™ Fetal bovine serum (FBS)	Applied StemCell	ASM-5017	15%
GlutaMax™ Supplement	ThermoFisher	35050061	2 mM
Non-essential amino acids	ThermoFisher	11140050	1X
Sodium Pyruvate	ThermoFisher	11360070	1 mM
HEPES Buffer	ThermoFisher	15630080	10 mM
100X Penicillin-Streptomycin	ThermoFisher	15140122	1X
ESGRO Leukemia Inhibitory Factor (mLIF), 1-Thio-Glycerol	EMD Millipore	ESG1107	10 ³ U/mL
	Sigma-Aldrich	M6145	7 µL/ 500 mL

Protocol

Recommended Culture Conditions

Culture on mitotically inactivated primary mouse embryonic fibroblast feeder cells, passage 3 (ASC, #ASF-1213)

Recommended Procedure

1. Prepare a monolayer of mitotically inactivated (i.e. γ -irradiated) primary mouse embryonic fibroblast (MEF) feeder cells on a 10 cm culture dish.
2. Before plating the ES cells, replace the MEF medium with mESC culture medium.
3. Thaw and plate one vial of frozen ES cells on feeder cell plate using mESC culture medium.
4. Change mESC culture medium every day.
5. On day 2, split cells in 1:3 ratio, using Trypsin (0.05% trypsin and 1mM EDTA).