

3914 Del Amo Blvd SUITE 901 TORRANCE, CA 90503 www.celprogen.com Phone: 310 542 8822 Fax: 310 542 8028 Email: info@celprogen.com stemcells@celprogen.com

DATA SHEET

Rat Mesenchymal (Bone Marrow) Stem Cell Culture - Frozen Vial **Catalog number:** 55096-23 Frozen Ampule (1.2 x 10^6 cells) of 1 x 10^6 viable cells upon thawing, **Description:** shipped with dry-ice. Also available in T25, T75, T150, and T225 tissue culture flask with plated cells, shipped at room temperature. The Rat Mesenchymal (Bone Marrow) Stem Cell Culture was derived from Rat neonatal bone marrow. They were maintained in Celprogen's Rat Mesenchymal (Bone Marrow) Stem Cell Culture Complete Growth Medium and sub-cultured every 24 to 48 hours on Rat Mesenchymal (Bone Marrow) Stem Cell Culture Extracellular Matrix. Source: Rat neonatal bone marrow Mycoplasma test: Negative-PCR and mycoplasma agar methods Sterility: Negative for bacteria, yeast, and mold **Storage Conditions:** Liquid nitrogen vapor phase for frozen Ampule of Rat Mesenchymal (Bone Marrow) Stem Cell Culture. For plated cells in tissue culture flask, upon receipt of the cells wipe the flask with 70% ethanol and transfer to sterile tissue culture hood. In the tissue culture hood remove the media from the cells and wash the cells with 1X PBS sterile solution, for 2-3 minutes, remove the 1X PBS solution and then Trypsinize. After Trypsinization of the Cells neutralize the Trypsin with equal volume of Rat Mesenchymal (Bone Marrow) Stem Cell Culture Complete Growth Media with Serum and collect the Cell suspension in sterile conical centrifuge tube in the tissue culture hood. Centrifuge the cell suspension at 100g for 7 minutes in centrifuge. Plate cells $5x10^5$ cells per pre-coated flasks with Rat Mesenchymal (Bone Marrow) Stem Cell Culture Extra-cellular Matrix for Expansion in Rat Mesenchymal (Bone Marrow) Stem Cell Culture Complete Growth Medium. **Positive Markers:** CD10+, CD13+, CD29+, CD44+, CD73+, CD105+, CD166+, Nestin+, CD34⁻ & CD45⁻ Morphology & Proliferation: Mixed population of cells with approximately 95% attached cells and the other 5.0% in suspension, need to change Stem Cell Culture media every day after 48 hours of initial Stem Cell Culture or when the media starts changing color to slight yellow from pink. Fast growing Stem Cell Culture, change media with Celprogen's Rat Mesenchymal (Bone Marrow) Stem Cell Culture Complete Growth Medium with the appropriate Rat Mesenchymal (Bone Marrow) Stem Cell Culture Extra-cellular Matrix.

Temperature 37°C in 5% CO₂ humidified incubator.



3914 Del Amo Blvd SUITE 901 TORRANCE, CA 90503 www.celprogen.com Phone: 310 542 8822 Fax: 310 542 8028 Email: info@celprogen.com stemcells@celprogen.com

Sub-culturing:

- **1.** Thaw the vial with gentle agitation in a 37°C water bath or a dry 37°C shaking incubator. For water bath thawing keep the O-ring out of the water.
- 2. Remove the thawed vial and wipe with 70% ethanol. Then transfer to the tissue culture hood.
- 3. Transfer the vial contents to a sterile centrifuge tube, and gently add pre-warmed Rat Mesenchymal (Bone Marrow) Stem Cell Culture Complete Growth Media to the centrifuge tube. Use additional Rat Mesenchymal (Bone Marrow) Stem Cell Culture Complete Growth Media to rinse the vial and transfer the liquid to the centrifuge tube, repeat this once more to ensure you have all the cells transferred to the 15ml centrifuge tube. Centrifuge the cells at 100g for 7 minutes. Remove the supernatant and re-suspend the cell pellet in 500ul of Rat Mesenchymal (Bone Marrow) Stem Cell Culture Complete Growth Media.
- 4. Add the 500ul of cells to T75 flask pre-coated with Rat Mesenchymal (Bone Marrow) Stem Cell Culture Extra-cellular Matrix with 10ml of Rat Mesenchymal (Bone Marrow) Stem Cell Culture Complete Growth Medium.
- **5.** Incubate the cells in the T25 flask at 37°C in a 5% CO₂ humidified incubator. Perform 100% Media Change every 24 to 48 hours.
- **6.** Medium renewal every other day or 2-3 days, sub-culturing ratio: 1:2 or 1:3 depending on the cell density.
- 7. Refer to protocols, flow diagrams and videos for more detail. <u>http://celprogen.com/tech.htm</u>

Freezing Medium:	Available for purchase Cat# M55096-23FM
Trypsin:	Available for purchase Cat# T1509-014
IX PBS:	Available for Purchase Cat# P1408-013
Storage temperature:	Liquid nitrogen vapor phase
Product Orders:	Before submitting an order you will be asked to read and accept the terms and conditions of Celprogen's Material Transfer Agreement (MTA).
Permits/Forms:	In addition to the MTA mentioned above, other CELPROGEN and/or regulatory permits may be required for the transfer of this CELPROGEN material. Anyone purchasing CELPROGEN material is ultimately responsible for obtaining the permits.
Notices	
& Disclaimers:	CELPROGEN products are intended for laboratory research purposes only. They are not intended for use in Humans. The Product, Rat Mesenchymal (Bone Marrow) Stem Cell Culture, is established and manufactured by CELPROGEN Inc., and is for Research Use Only. This product is not for re-sale or may not be transferred to a third party prior to written request and approval by CELPROGEN Inc.