

GFP-expressing D1-MSC cell line

Catalogue number: 160552

Sub-type:

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: GFP-expressing D1-MSC cell line

Alternate name:

Class:

Conjugate:

Description: Mesenchymal stem cells (MSCs) are multipotent stem cells found in bone marrow that are important for making and repairing skeletal tissues, such as cartilage, bone and the fat found in bone marrow. D1-MSC's are a cell line of murine MSCs from bone marrow. D1-MSCs were transduced with the lentiviral construct pSIN-EF2-GFP-Pur, which codifies GFP from *Aequorea coerulescens* under the human elongation factor-1 alpha (EF-1 alpha) promoter, linked to puromycin resistance through an internal ribosome entry site (IRES) motif.

Purpose:

Parental cell: D1-MSC

Organism: Mouse

Tissue: Bone Marrow

Model: Stem Cells

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties: Adherent cells

Production details: Complementary DNA (cDNA) of GFP was cloned from the plasmid pAcGFP1-N1

containing GFP from *Aequorea coerulescens* and cloned on a lentiviral vector (pSIN) to give pSIN-EF2-GFP-Pur. This was used to transfect HEK293 cells from which the supernatant-containing lentivirus was harvested after 3 days. This supernatant was used to transduce D1-MSCs for 1 month after which GFP expression was confirmed by fluorescence microscopy. Lack of virus production by the now GFP-expressing D1-MSCs was confirmed...

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: GFP

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes:

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium: Dulbecco's Modified Eagle's Medium (DMEM) high glucose media supplemented with 10% heat-non-inactivated fetal calf serum and 1 unit/mL of penicillin-streptomycin and puromycin at 12.5 µg/mL.

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions: Dry ice

Related tools

Related tools: Erythropoietin expressing D1-MSC cell line ; Sonic hedgehog-expressing D1-MSC cell line ; Luciferase-expressing D1-MSC cell line

References

References:

CancerTools.org