

Luciferase-expressing D1-MSC cell line

Catalogue number: 160551

Sub-type:

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Luciferase-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. Luciferase is a generic term for the class of oxidative enzymes that produce bioluminescence, and is usually distinguished from a photoprotein. Luciferases are widely used in biotechnology, for microscopy and as reporter genes, for many of the same applications as fluorescent proteins. However, unlike fluorescent proteins, luciferases do not require an external light source, but do require addition of luciferin, the consumable substrate. The detection of luciferase can be used to track the location of MSCs by non invasive image techniques.

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: pSIN-EF2-Luc-Pur was transfected into One Shot¹ Stbl3TM Chemically Competent E. coli, extracted with QIAprep¹ Spin Maxiprep Kit (Qiagen) and quantified with Nanodrop ND-1000 Spectrophotometer. 2.5 x10⁶ 293T cells were cultured with DMEM, 10% FCS and 1% P/S overnight and further transfected with 9mg of pSIN-EF2-Luc-Pur 3mg of pMD2.G (Addgene plasmid 12259), 6mg of psPAX2 (Addgene plasmid 12260) and 45mL of lipofectamine¹ 2000 in OptiMEM medium following provider's recommendations. A...

Formulation:

Recommended controls: WT D1-MSC

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Luciferase

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes:

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium: DMEM supplemented with 10% FCS and P/S

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 ; Luciferase-expressing D1-MSC cell line ; GFP-expressing D1-MSC cell line

References

References:

CancerTools.org