

DM1-1 iPAX7-hiPS cell line

Catalogue number: 157740

Sub-type:

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: DM1-1 iPAX7-hiPS cell line

Alternate name: Myotonic dystrophy 1 (DM-1)

Class:

Conjugate:

Description: Myotonic dystrophy is a genetic disease characterized by a loss of muscle function. Myotonic dystrophy type 1 (DM1), the most common form of myotonia, is caused by mutations in the DMPK gene. Currently, there is no cure or treatment for DM1. 4 total cell lines are available: 2 undifferentiated hiPSC lines from two DM1 patients (DM1-1 hiPS cell line, DM1-2 hiPS cell line) and 2 differentiated skeletal muscle cell lines (DM1-1 iPAX7-hiPS cell line and DM1-2 iPAX7-hiPS cell line).

Purpose:

Parental cell: skin fibroblasts from a diagnosed DM1 patient

Organism: Human

Tissue:

Model: Stem Cells

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: To generate a cell-based model for DM1, researchers obtained a sample of skin fibroblasts from two diagnosed DM1 patients. These fibroblasts (DM1-1 and DM1-2) were

reprogrammed to hiPS cells via the Sendai virus method. Following reprogramming, DM1-1 and DM1-2 hiPS cells were modified to express PAX7 under the presence of exogenous doxycycline. Expression of PAX7 results in the differentiation of the DM1-1 and DM1-2 hiPSC cells into skeletal muscle cells. These differentiated muscle cells re...

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: myotonic dystrophy protein kinase (DMPK)

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes:

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions: Dry ice

Related tools

Related tools: DM1-1 hiPS cell line ; DM1-2 iPAX7-hiPS cell line ; DM1-2 hiPS cell line

References

References:

CancerTools.org