

HM3 Cell Line

Catalogue number: 153328

Sub-type: Continuous

Images:

Contributor

Inventor: Simon Cook

Institute: Babraham Institute

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: HM3 Cell Line

Alternate name: Mitogen-activated protein kinase kinase kinase 3, MAPK/ERK kinase kinase 3, MEK kinase 3, MEKK 3

Class:

Conjugate:

Description: HM3 cells are HEK 293 cells stably expressing conditional kinase ?MEKK3:ER* from the pBabePuro plasmid. ?MEKK3:ER* consists of the isolated kinase domain of MEKK3 fused in-frame to a modified form of the hormone binding domain of the estrogen receptor (hbER*) that can be de-repressed by 4-hydroxytamoxifen (4-HT) but not ?-estradiol. In this case the * refers to a point mutation that ablates estradiol binding but allows 4-HT binding. Activation of ?MEKK3:ER* leads to the strong activation of the JNK and p38 pathways and a weaker activation of ERK1/2. This cell line can be used to study the role and factors impacting on the JNK, p38 and ERK1/2 signalling pathways such as gene expression, cell proliferation, cell cycle arrest and cell death.. The cells are puromycin resistant. Conditional kinase activation of ?MEKK3:ER* can be induced with 100nM 4-HT.

Purpose:

Parental cell: HEK 293

Organism: Human

Tissue: Kidney

Model:

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties: Adherent cell line

Production details: HEK 293 cells were transfected with the pBabePuro plasmid expressing Δ²⁻¹⁰MEKK3:ER*. Stable transfectants were selected using puromycin and ring cloning.

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: MEKK3

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes:

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium: Phenol red-free Dulbecco's modified Eagle's medium (DMEM) high glucose version, 2 mM L-glutamine, 10% fetal bovine serum (FBS), 2 µg/ml puromycin.

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions: Dry ice

Related tools

Related tools: HR1 Cell Line

References

References:

CancerTools.org