Mouse fibrosarcoma VEGF164 Cell Line

Catalogue number: 153240
Sub-type: Continuous
Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Mouse fibrosarcoma VEGF164 Cell Line

Alternate name: VEGF-A, VEGF12, VEGF164, VEGF188

Class:
Conjugate:
Description: Mouse fibrosarcoma cell lines that are capable of expressing all vascular endothelial growth factor (VEGF) isoforms (control) or only single isoforms of VEGF (VEGF120, VEGF164, or VEGF188) were developed under endogenous VEGF promoter control. Using Cre/Lox technology, mice expressing all or only single isoforms of VEGF, known as Vegfa120/120, Vegfa164/164, and Vegfa188/188 mice were developed. Primary fibroblasts were isolated from mouse embryos that were produced by heterozygous breeding pairs of mice expressing single or all isoforms of vascular endothelial growth factor-A (VEGF-A) on Swiss background. Fibroblasts were immortalized and oncogenically transformed by retroviral transduction with SV40 and HRAS (characterised in Tozer et al., 2008. Cancer Res; 68: (7)). The original rationale for the development of these cell lines relates to the fact that tubulin-binding vascular-disrupting agents (VDA) are currently in clinical trials for cancer therapy but the factors that influence tumour susceptibility to these agents are poorly understood. Researchers evaluated the consequences of modifying tumour vascular morphology and function on vascular and therapeutic response to combretastatin-A4 3-O-phosphate (CA-4-P), which was chosen as a model VDA. The cell lines themselves could be potentially valuable for the commercial/pharmaceutical industry.
Purpose:
Parental cell: MEF
Organism: Mouse
Tissue: Embryo
Model: Immortalised Line
Gender:
Isotype:

Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:
Growth properties: Adherent
Production details: Using Cre/Lox technology, mice expressing all or only single isoforms of VEGF, known as Vegfa120/120, Vegfa164/164, and Vegfa188/188 mice were developed. Primary fibroblasts were isolated from mouse embryos that were produced by heterozygous breeding pairs of mice expressing single or all isoforms of vascular endothelial growth factor-A (VEGF-A) on Swiss background. Fibroblasts were immortalized and oncogenically transformed by retroviral transduction with SV4...
Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: VEGF120

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:
Application notes:

Handling

Format: Frozen
Concentration:
Passage number:
Growth medium: High glucose DMEM (Invitrogen) medium, L-glutamine, FCS, G-418 and puromycin. antibiotics G-418 and puromycin
Temperature:
Atmosphere:

Volume:
Storage medium:
Storage buffer:
Storage conditions:
Shipping conditions: Dry ice

Related tools

Related tools: Mouse fibrosarcoma Luciferase2 mStrawberry VEGF164 Cell Line

References

References: Tozer et al. 2008. Cancer Res. 68(7):2301-11. PMID: 18381437. ; Blood vessel maturation and response to vascular-disrupting therapy in single vascular endothelial growth factor-A isoform-producing tumors.