

# Mouse fibrosarcoma Luciferase2 mStrawberry VEGF120 Cell Line

**Catalogue number:** 152853

**Sub-type:** Continuous

**Images:**

## Contributor

**Inventor:** Gillian Tozer

**Institute:** University of Sheffield

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** Mouse fibrosarcoma Luciferase2 mStrawberry VEGF120 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. 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 VEGFWT (Control) Cell Line ; Mouse fibrosarcoma Luciferase2 mStrawberry VEGF164 Cell Line ; Mouse fibrosarcoma Luciferase2 mStrawberry VEGF188 Cell Line ; Mouse fibrosarcoma VEGF120 Cell Line

## References

**References:** Differential Expression of VEGFA Isoforms Regulates Metastasis and Response to Anti-VEGFA Therapy in Sarcoma. English et al. 2017. Cancer Res. 77(10):2633-2646. PMID: 28377452. ; Differential Expression of VEGFA Isoforms Regulates Metastasis and Response to Anti-VEGFA Therapy in Sarcoma.

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