

Flt-1 (H-225): sc-9029

BACKGROUND

Three cell membrane receptor tyrosine kinases, Flt (also designated VEGF-R1), Flk-1 (also designated VEGF-R2) and Flt-4, putatively involved in the growth of endothelial cells, are characterized by the presence of seven immunoglobulin-like sequences in their extracellular domain. These receptors exhibit high degrees of sequence relatedness to each other as well as lesser degrees of relatedness to the class III receptors including CSF-1/Fms, PDGR, SLFR/Kit and Flt-3/Flk-2. Two members of this receptor class, Flt-1 and Flk-1, have been shown to represent high affinity receptors for vascular endothelial growth factors (VEGFs). On the basis of structural similarity to Flt and Flk-1, it has been speculated that Flt-4 might represent a third receptor for either VEGF or a VEGF-related ligand.

CHROMOSOMAL LOCATION

Genetic locus: FLT1 (human) mapping to 13q12.2; Flt1 (mouse) mapping to 5 G3.

SOURCE

Flt-1 (H-225) is a rabbit polyclonal antibody raised against amino acids 23-247 of Flt-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Flt-1 (H-225) is recommended for detection of Flt-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Flt-1 siRNA (h): sc-29319, Flt-1 siRNA (m): sc-35395, Flt-1 shRNA Plasmid (h): sc-29319-SH, Flt-1 shRNA Plasmid (m): sc-35395-SH, Flt-1 shRNA (h) Lentiviral Particles: sc-29319-V and Flt-1 shRNA (m) Lentiviral Particles: sc-35395-V.

Molecular Weight of Flt-1: 180 kDa.

Positive Controls: Flt-1 (h): 293T Lysate: sc-115518, A-10 cell lysate: sc-3806 or MDA-MB-231 cell lysate: sc-2232.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

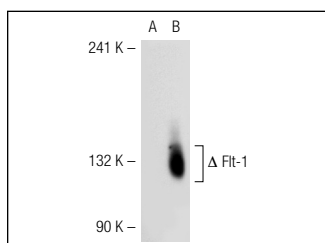
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

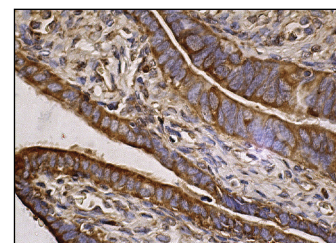
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



Flt-1 (H-225): sc-9029. Western blot analysis of Flt-1 expression in non-transfected: sc-117752 (A) and truncated human Flt-1 transfected: sc-115518 (B) 293T whole cell lysates.



Flt-1 (H-225): sc-9029. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing membrane and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Podar, K., et al. 2002. Vascular endothelial growth factor-induced migration of multiple myeloma cells is associated with β 1 Integrin- and phosphatidylinositol 3-kinase-dependent PKC α activation. *J. Biol. Chem.* 277: 7875-7881.
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- Long, J.B., et al. 2009. VEGF-A and Semaphorin3A: modulators of vascular sympathetic innervation. *Dev. Biol.* 334: 119-132.
- Benakanakere, I., et al. 2010. Synthetic progestins differentially promote or prevent 7,12-dimethylbenz(a)anthracene-induced mammary tumors in sprague-dawley rats. *Cancer Prev. Res.* 3: 1157-1167.
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- Dhondt, J., et al. 2011. Neuronal FLT1 receptor and its selective ligand VEGF-B protect against retrograde degeneration of sensory neurons. *FASEB J.* 25: 1461-1473.
- Sela, S., et al. 2011. Local retention versus systemic release of soluble VEGF receptor-1 are mediated by heparin-binding and regulated by heparanase. *Circ. Res.* 108: 1063-1070.
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Try **Flt-1 (D-2): sc-271789**, our highly recommended monoclonal alternatives to Flt-1 (H-225). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Flt-1 (D-2): sc-271789**.