

Flt-4 (C-20): sc-321

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: FLT4 (human) mapping to 5q35.3; Flt4 (mouse) mapping to 11 B1.2.

SOURCE

Flt-4 (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Flt-4 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-321 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Flt-4 (C-20) is recommended for detection of Flt-4 p170 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-4 siRNA (h): sc-35397, Flt-4 siRNA (m): sc-35398, Flt-4 shRNA Plasmid (h): sc-35397-SH, Flt-4 shRNA Plasmid (m): sc-35398-SH, Flt-4 shRNA (h) Lentiviral Particles: sc-35397-V and Flt-4 shRNA (m) Lentiviral Particles: sc-35398-V.

Molecular Weight of Flt-4: 150 kDa.

Positive Controls: rat liver extract: sc-2395, K-562 whole cell lysate: sc-2203 or HEL 92.1.7 cell lysate: sc-2270.

RESEARCH USE

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

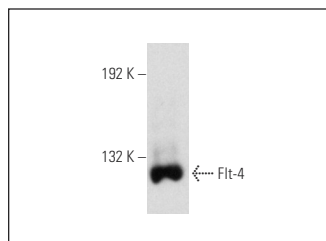
PROTOCOLS

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

STORAGE

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

DATA



Flt-4 (C-20): sc-321. Western blot analysis of Flt-4 expression in HEL 92.1.7 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Fielder, W., et al. 1997. Expression of FLT4 and its ligand VEGF-C in acute myeloid leukemia. *Leukemia* 11: 1234-1237.
2. Donnem, T., et al. 2010. Co-expression of PDGF-B and VEGFR-3 strongly correlates with lymph node metastasis and poor survival in non-small-cell lung cancer. *Ann. Oncol.* 21: 223-231.
3. Preusser, M., et al. 2010. Disease stabilization of progressive olfactory neuroblastoma (esthesioneuroblastoma) under treatment with sunitinib mesylate. *J. Neurooncol.* 97: 305-308.
4. Andrade, W.A., et al. 2010. Early endosome localization and activity of RasGEF1b, a toll-like receptor-inducible Ras guanine-nucleotide exchange factor. *Genes Immun.* 11: 447-457.
5. Karki, R., et al. 2011. The MARCH family E3 ubiquitin ligase K5 alters monocyte metabolism and proliferation through receptor tyrosine kinase modulation. *PLoS Pathog.* 7: e1001331.
6. Luo, Y., et al. 2011. Cryptotanshinone inhibits lymphatic endothelial cell tube formation by suppressing VEGFR-3/ERK and small GTPase pathways. *Cancer Prev. Res.* 4: 2083-2091.
7. Luo, Y., et al. 2012. Rapamycin inhibits lymphatic endothelial cell tube formation by downregulating vascular endothelial growth factor receptor 3 protein expression. *Neoplasia* 14: 228-237.
8. Anselmi, F., et al. 2012. c-ABL modulates MAP kinases activation downstream of VEGFR-2 signaling by direct phosphorylation of the adaptor proteins GRB2 and NCK1. *Angiogenesis* 15: 187-197.

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Try **Flt-4 (E-3): sc-514825** or **Flt-4 (D-6): sc-28297**, our highly recommended monoclonal alternatives to Flt-4 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Flt-4 (E-3): sc-514825**.