SANTA CRUZ BIOTECHNOLOGY, INC.

VEGFR2 (m): 293T Lysate: sc-120289

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

REFERENCES

1. Shibuya, M., et al. 1990. Nucleotide sequence and expression of a novel human receptor-type tyrosine kinase gene (Flt) closely related to the Fms family. Oncogene 5: 519-524.
2. Matthews, W., et al. 1991. A receptor tyrosine kinase cDNA isolated from a population of enriched primitive hematopoietic cells and exhibiting close genetic linkage to c-Kit. Proc. Natl. Acad. Sci. USA 88: 9026-9030.
3. De Vries, C., et al. 1992. The Fms-like tyrosine kinase, a receptor for vascular endothelial growth factor. Science 255: 989-991.
4. Millauer, B., et al. 1993. High affinity VEGF binding and developmental expression suggest Flk-1 as a major regulator of vasculogenesis and angiogenesis. Cell 72: 835-846.
5. Oelrichs, R.B., et al. 1993. NYK/Flk-1: a putative receptor protein tyrosine kinase isolated from E10 embryonic neuroepithelium is expressed in endothelial cells of the developing embryo. Oncogene 8: 11-18.
6. Galland, F., et al. 1993. The FLT4 gene encodes a transmembrane tyrosine kinase related to the vascular endothelial growth factor receptor. Oncogene 8: 1233-1240.

CHROMOSOMAL LOCATION

Genetic locus: Kdr (mouse) mapping to 5 C3.3.

PRODUCT

VEGFR2 (m): 293T Lysate represents a lysate of mouse VEGFR2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

VEGFR2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive VEGFR2 antibodies. Recommended use: 10-20 µl per lane.

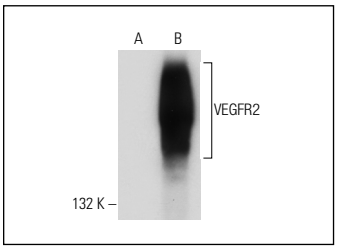
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

VEGFR2 (A-3): sc-6251 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse VEGFR2 expression in VEGFR2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

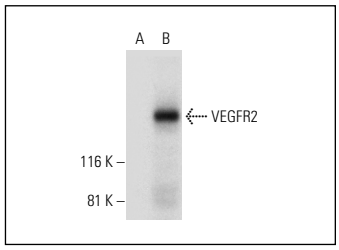
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



VEGFR2 (A-3): sc-6251. Western blot analysis of VEGFR2 expression in non-transfected: sc-117752 (**A**) and mouse VEGFR2 transfected: sc-120289 (**B**) 293T whole cell lysates.



VEGFR2 (F-10): sc-393179. Western blot analysis of VEGFR2 expression in non-transfected: sc-117752 (**A**) and mouse VEGFR2 transfected: sc-120289 (**B**) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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