

Flt-3/Flk-2 (S-18): sc-480

BACKGROUND

Stem cell tyrosine kinase (STK-1) has been cloned from a CD34⁺ hematopoietic stem cell enriched library and identified as the human homolog of a previously identified gene of mouse origin designated either Flk-2 or Flt-3. The STK-1 cDNA encodes a protein of 993 amino acids with 85% identity to Flt-3/Flk-2. STK-1 is a member of the type III receptor tyrosine kinase family that includes Kit (steel factor receptor), Fms and PDGF. STK-1 expression in blood and marrow is restricted to CD34⁺ cells, a population greatly enriched for hematopoietic stem/progenitor cells. STK-1 antiserum recognizes two polypeptides in these cells. The mouse homolog of STK-1, designated Flt-3/Flk-2, is expressed at high levels in hematopoietic cells and also in neural, gonadal, hepatic and placental tissues. It has been suggested that STK-1 and its murine homolog Flt-3/Flk-2 may function as growth factor receptors on hematopoietic stem and/or progenitor cells.

CHROMOSOMAL LOCATION

Genetic locus: FLT3 (human) mapping to 13q12.2.

SOURCE

Flt-3/Flk-2 (S-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within the kinase insert region of Flt-3/Flk-2 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-480 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Flt-3/Flk-2 (S-18) is recommended for detection of Flt-3/Flk-2 p160 and p130 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Flt-3/Flk-2 siRNA (h): sc-29320, Flt-3/Flk-2 shRNA Plasmid (h): sc-29320-SH and Flt-3/Flk-2 shRNA (h) Lentiviral Particles: sc-29320-V.

Molecular Weight of Flt-3/Flk-2 polypeptides: 160/130 kDa.

Positive Controls: THP-1 cell lysate: sc-2238 or K-562 nuclear extract: sc-2130.

STORAGE

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

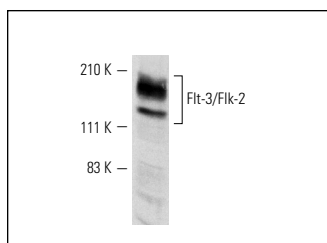
PROTOCOLS

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

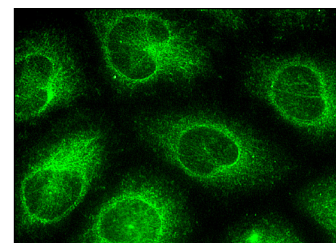
RESEARCH USE

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

DATA



Flt-3/Flk-2 (S-18): sc-480. Western blot analysis of Flt-3/Flk-2 expression in THP-1 whole cell lysate.



Flt-3/Flk-2 (S-18): sc-480. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

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Try **Flt-3/Flk-2 (SF1.340): sc-19635** or **Flt-3/Flk-2 (BV10): sc-21788**, our highly recommended monoclonal alternatives to Flt-3/Flk-2 (S-18). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Flt-3/Flk-2 (SF1.340): sc-19635**.