

Flt 3-L (F-19): sc-1573

BACKGROUND

Flt 3 ligand (Flt 3-L), variously designated Flt 3/Flk 2 ligand or FL, is a hematopoietic growth factor that stimulates the proliferation of stem and CD34⁺ progenitor cells and has been cloned from both mouse and human genomes. Flt 3-L is a potent *in vitro* growth stimulator of granulocyte-macrophage colony-stimulating factor (GM-CSF), interleukin-3 (IL-3), and G-CSF-dependent granulocyte-macrophage committed precursors from Lin CD34⁺ bone marrow cells as well as other primitive B cell populations. Additionally, Flt 3-L stimulates the proliferation of hematopoietic progenitor cells isolated from mouse fetal liver or adult mouse bone marrow. Flt 3-L does not, however, affect the growth of erythroid-committed progenitors. Flt-3 ligand exists in two forms and is active as both a soluble and as a membrane-bound ligand. The Flt 3-L receptor, Flt 3, is a tyrosine kinase expressed on CD34⁺ cells that shares a high degree of homology with the SCF (stem cell factor) receptor, c-Kit and c-Fms.

CHROMOSOMAL LOCATION

Genetic locus: FLT3LG (human) mapping to 19q13.33; Flt3l (mouse) mapping to 7 B4.

SOURCE

Flt 3-L (F-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Flt 3-L of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-1573 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

RESEARCH USE

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

APPLICATIONS

Flt 3-L (F-19) is recommended for detection of Flt 3-L 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).

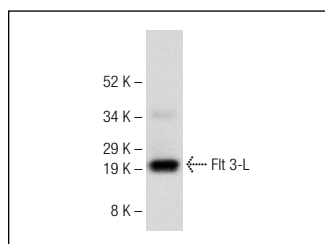
Suitable for use as control antibody for Flt 3-L siRNA (h): sc-39488, Flt 3-L siRNA (m): sc-39489, Flt 3-L shRNA Plasmid (h): sc-39488-SH, Flt 3-L shRNA Plasmid (m): sc-39489-SH, Flt 3-L shRNA (h) Lentiviral Particles: sc-39488-V and Flt 3-L shRNA (m) Lentiviral Particles: sc-39489-V.

Molecular Weight of Flt 3-L: 30 kDa.

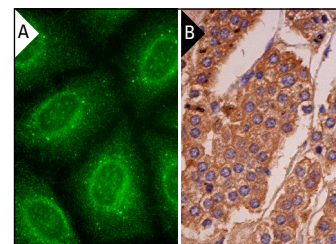
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Flt 3-L (F-19): sc-1573. Western blot analysis of human recombinant Flt 3-L.



Flt 3-L (F-19): sc-1573. Immunofluorescence staining of methanol-fixed HeLa cells showing granular cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic and membrane staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Peters, M., et al. 2001. Interleukin-6 and the soluble interleukin-6 receptor induce stem cell factor and Flt 3-L expression *in vivo* and *in vitro*. *Exp. Hematol.* 29: 146-155.
- Yo, Y.T., et al. 2007. Coexpression of Flt 3 ligand and GM-CSF genes modulates immune responses induced by HER2/neu DNA vaccine. *Cancer Gene Ther.* 14: 904-917.
- Jiang, Q., et al. 2013. A novel recombinant DNA vaccine encoding *Mycobacterium tuberculosis* ESAT-6 and FL protects against *Mycobacterium tuberculosis* challenge in mice. *J. Biomed. Res.* 27: 406-420.

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **Flt 3-L (F-6): sc-365266**, our highly recommended monoclonal alternative to Flt 3-L (F-19).