

DESCRIPTION

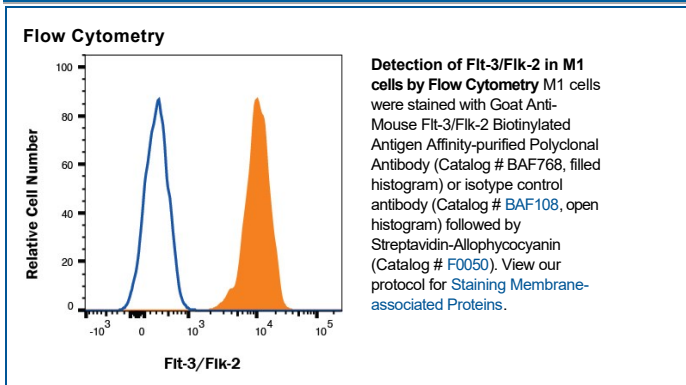
Species Reactivity	Mouse
Specificity	Detects mouse Flt-3/Flk-2 in Western blots. In Western blots, less than 2% cross-reactivity with recombinant human Flt-3 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Flt-3/Flk-2 Asn28-Ser544 Accession # Q00342
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse Flt-3/Flk-2 Fc Chimera (Catalog # 768-F3)
Flow Cytometry	0.25 µg/10 ⁶ cells	M1 mouse myeloid leukemia cell line

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The Flt-3 (*fms*-like tyrosine kinase) receptor, also named Flk-2 (fetal liver kinase) and Stk-1 (stem cell tyrosine kinase) and designated CD135, is a member of the class III subfamily of receptor tyrosine kinases. This family includes KIT, the receptor for SCF, and C-FMS, the receptor for M-CSF. The extracellular region of these receptors contains five immunoglobulin-like domains and the intracellular region contains a split kinase domain. Mouse Flt-3 cDNA encodes a 992 amino acid (aa) residue type I membrane protein with a 27 aa residue signal peptide, a 517 aa extracellular domain with 10 potential N-linked glycosylation sites, a 20 aa residue transmembrane domain and a 428 aa residue cytoplasmic domain. Mouse Flt-3 shares 85% amino acid sequence identity with human Flt-3. Flt-3 expression has been detected in various tissues, including placenta, gonads, and tissues of nervous and hematopoietic origin. Among hematopoietic cells, the expression of Flt-3 was found to be restricted to the highly enriched stem/progenitor cell populations. The ligand for Flt-3 (FL) has been identified to be a transmembrane protein with structural homology to M-CSF and SCF. Recombinant soluble Flt-3 Fc chimeric protein has been shown to bind FL with high affinity and is a potent FL antagonist.

References:

1. Rosnet, O. *et al.* (1996) *Acta. Haemato.* **95**:218.
2. Drexler, H.G. (1996) *Leukemia* **10**:588.