

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Flt-3/FIk-2 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant human (rh) Flt-3 is observed and no cross-reactivity with rhPDGF-R $\alpha$ , rhPDGF-R $\beta$ , or rhSCF-R is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 113315
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Flt-3/FIk-2 Asn28-Ser544 Accession # Q00342
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m filtered solution in PBS.

## 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
<b>Western Blot</b>	1 $\mu$ g/mL	Recombinant Mouse Flt-3/FIk-2 Fc Chimera (Catalog # 768-F3)

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

The Flt-3 (*fms*-like tyrosine kinase) receptor, also named FIk-2 (fetal liver kinase) and Stk-1 (stem cell tyrosine kinase), 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) type I membrane protein with a 27 aa signal peptide, a 517 aa extracellular domain with 10 potential N-linked glycosylation sites, a 20 aa transmembrane domain and a 428 aa cytoplasmic domain. Mouse Flt-3 shares 85% aa 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.