

#### DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Flt-3/Flk-2 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human Flt-3 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 113308
<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/Flk-2 Asn28-Ser544 (predicted) Accession # Q00342
<b>Conjugate</b>	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

#### 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	M1 mouse myeloid leukemia cell line

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

#### 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.

#### PRODUCT SPECIFIC NOTICES

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