

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Flt-3/Flk-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 α , rhPDGF-R β , or rhSCF-R is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 113315
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Flt-3/Flk-2 Asn28-Ser544 Accession # Q00342
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

The Flt-3 (*fms*-like tyrosine kinase) receptor, also named Flk-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.

PRODUCT SPECIFIC NOTICES

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