

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Flt-3/Flk-2 in ELISA.
Source	Monoclonal Mouse IgG ₁ Clone # 1038615
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Human embryonic kidney cell, HEK293-derived human Flt-3/Flk-2 Asn27-Asn541 Accession # P36888
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.

Neutralization 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 130-155 kDa member of the class III subfamily of receptor tyrosine kinases that also includes KIT, the receptor for SCF and FMS, the receptor for M-CSF (1). The extracellular region of these receptors contains five immunoglobulin-like domains and the intracellular region contains a split kinase domain. Human Flt-3 cDNA encodes a 993 amino acid (aa) type I membrane protein with a 26 aa signal peptide, a 515 aa extracellular domain (ECD) with 10 potential N-linked glycosylation sites, a 21 aa transmembrane domain and a 431 aa cytoplasmic domain. Within ECD human Flt-3 shares 85% and 82% aa sequence identity with mouse and rat Flt-3, respectively. 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 (2).

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