

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PDGF R α in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human PDGF R β or recombinant mouse PDGF R α is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 35248
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human PDGF R α
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	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

PDGF is a major serum mitogen that can exist as a homo- or heterodimeric protein consisting of disulfide-linked PDGF-A and PDGF-B chains. The PDGF-AA, PDGF-BB and PDGF-AB isoforms have been shown to bind to two distinct cell surface PDGF receptors with different affinities. Whereas PDGF R α binds all three PDGF isoforms with high affinity, PDGF R β binds PDGF-BB and AB, but not PDGF-AA. Both PDGF R α and PDGF R β are members of the class III subfamily of receptor tyrosine kinases (RTK) that also includes the receptors for M-CSF, SCF and Flt3 ligand. All class III RTKs are characterized by the presence of five immunoglobulin-like domains in their extracellular region and a split kinase domain in their intracellular region. PDGF binding induces receptor homo- and heterodimerization and signal transduction. The expression of the α and β receptors is independently regulated in various cell types. Only PDGF R α is expressed in oligodendrocyte progenitor cells, mesothelial cell and liver endothelial cells. Soluble PDGF-R α has been detected in cell conditioned medium and human plasma. Recombinant soluble PDGF R α binds PDGF with high affinity and is a potent PDGF antagonist (1).

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