Anti-Human PDGFR-alpha (#8A89)

20150116ML

FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	**101-M42**
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with N-terminal recombinant human platelet-derived growth factor receptor alpha fragment. The IgG1 fraction of culture supernatant was purified by Protein G affinity chromatography.

Target Background

Synonyms (Target):	PDGFRA; CD140A; PDGFR2; PDGFR-2; RHEPDGFRA

PDGF is a major serum mitogen that can exist as a homo- or heterodimeric protein consisting of disulfidelinked 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 Rα binds all three PDGF isoforms with high affinity, PDGF Rβ binds PDG-FBB and AB, but not PDGFAA. Both PDGF Rα and PDGF Rβ are members of the class III subfamily of receptor tyrosine kinases (RTK) that also includes the receptors for MCSF, 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 Rα is expressed in oligodendrocyte progenitor cells, mesothelial cell and liver endothelial cells. Soluble PDGFRα has been detected in cell conditioned medium and human plasma. Recombinant soluble PDGF Rα binds PDGF with high affinity and is a potent PDGF antagonist.

Database References Target

Protein RefSeq:	NP_006197.1
Uniprot ID:	P16234
mRNA RefSeq:	NM_006206

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#8A89)
Isotype	IgG1
Purification	Protein G chromatography
Antigen	N-terminal recombinant human PDGFR alpha fragment
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 500 µl sterile PBS and the final concentration is 200 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody detects human PDGFR-α in Western blots. No cross-reactivity is shown with human PDGFR-β.
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AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

The antibody can be used within the following applications:

WB, IHC (Formalin/Paraffin)

Recommended usage:

WB: 1:500-1000

IHC: 1:100-400

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!

Application/Handling

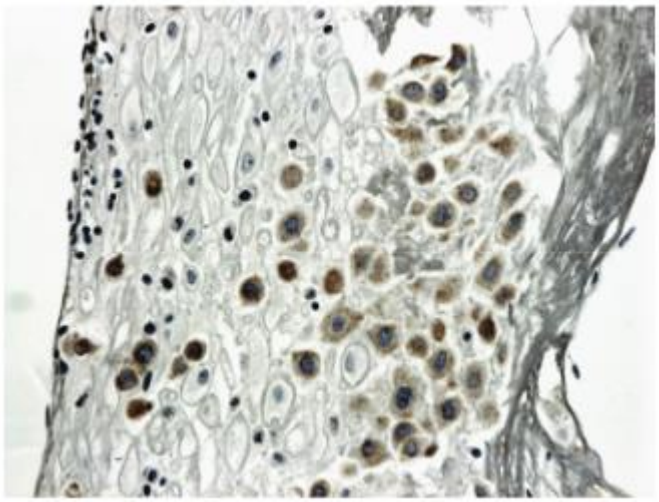

Fig. 1: Formalin fixed and paraffin embedded normal human placenta tissue is subjected to mouse anti-human PDGFR-alpha.