

PDGFRA Conjugated Antibody

Catalog No: #C38364



Package Size: #C38364-AF350 100ul #C38364-AF405 100ul #C38364-AF488 100ul
 #C38364-AF555 100ul #C38364-AF594 100ul #C38364-AF647 100ul
 #C38364-AF680 100ul #C38364-AF750 100ul #C38364-Biotin 100ul

Orders: order@signalwayantibody.com
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Description

Product Name	PDGFRA Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total PDGFRA antibody.
Immunogen Description	Recombinant protein of human PDGFRA.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	CD140A; MGC74795; PDGFR2; Rhe-PDGFRA;
Accession No.	Swiss-Prot#:P16234NCBI Gene ID:5156
Uniprot	P16234
GeneID	5156;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	123
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

Background

Platelet derived growth factor (PDGF) family proteins exist as several disulphide-bonded, dimeric isoforms (PDGF AA, PDGF AB, PDGF BB, PDGF CC, and PDGF DD) that bind in a specific pattern to two closely related receptor tyrosine kinases, PDGF receptor α (PDGFR α) and PDGF receptor β (PDGFR β). PDGFR α and PDGFR β share 75% to 85% sequence homology between their two intracellular kinase domains, while the kinase insert and carboxy-terminal tail regions display a lower level (27% to 28%) of homology (1). PDGFR α homodimers bind all PDGF isoforms except those containing PDGF D. PDGFR β homodimers bind PDGF BB and DD isoforms, as well as the PDGF AB heterodimer. The heteromeric PDGF receptor α/β binds PDGF B, C, and D homodimers, as well as the PDGF AB heterodimer (2). PDGFR α and PDGFR β can each form heterodimers with EGFR, which is also activated by PDGF (3). Various cells differ in the total number of receptors present and in the receptor subunit composition, which may account for responsive differences among cell types to PDGF binding (4). Ligand binding induces receptor dimerization and autophosphorylation, followed by binding and activation of cytoplasmic SH2 domain-containing signal transduction molecules, such as GRB2, Src, GAP, PI3 kinase, PLC γ , and NCK. A number of different signaling pathways are initiated by activated PDGF receptors and lead to control of cell growth, actin reorganization, migration, and differentiation (5). Tyr751 in the kinase-insert region of PDGFR β is the docking site for PI3 kinase (6). Phosphorylated pentapeptides derived from Tyr751 of PDGFR β (pTyr751-Val-Pro-Met-Leu) inhibit the association of the carboxy-terminal SH2 domain of the p85 subunit of PI3 kinase with PDGFR β (7). Tyr740 is also required for PDGFR β -mediated PI3 kinase activation (8).

Note: This product is for in vitro research use only