

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PDGF-D in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) PDGF, rhPDGF-AA, rhPDGF-AB, rhPDGF-BB, rhPDGF-C, or recombinant rat PDGF-AB is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 680018
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human PDGF-DD Ser250-Arg370 Accession # Q9GZP0.1
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.

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 platelet-derived growth factor (PDGF) family consists of four disulfide-linked homodimers and one heterodimer (PDGF-AB). These proteins regulate diverse cellular functions through interactions with PDGF R α and R β (1, 2). Mature PDGF-DD associates with PDGF R β and triggers signaling through PDGF R β homodimers and PDGF R α /R β heterodimers (3-5). The human PDGF-DD cDNA encodes a 370 amino acid (aa) precursor that includes a 23 aa signal sequence, one CUB domain, and one PDGF/VEGF domain (3, 4). The PDGF/VEGF domain shares 27-35% aa sequence identity with the corresponding regions of other PDGF family members. Human PDGF-DD shares 87% aa sequence identity with mouse and rat PDGF-DD. PDGF-DD is secreted as a 100 kDa latent homodimer which is activated by proteolysis to release a 35 kDa bioactive protein containing the PDGF/VEGF homology domain (3, 4, 6, 7). A splice variant of PDGF-DD has a 6 aa deletion near the N-terminus. A 72 aa deletion within the PDGF/VEGF domain generates an inactive protein in mouse but has not been detected in human (8). PDGF-DD is widely expressed in embryonic and adult tissues (3, 9, 10), and PDGF R β is expressed in a generally complementary pattern (9, 11, 12). PDGF-DD functions as a growth factor for renal artery smooth muscle cells and lens epithelial cells, and as a macrophage chemoattractant (5, 9-11). PDGF-DD is overexpressed in and contributes to several disease states, including renal and hepatic fibrosis, mesangial proliferative glomerulopathy, pulmonary lymphoid infiltration, and many cancers (6, 11-15). PDGF-DD functions in both paracrine and autocrine manners (6, 7, 14).

PRODUCT SPECIFIC NOTICES

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