



Mouse Anti-Human PDGFRA monoclonal antibody, clone NN18 (CABT-ZB525)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	It reacts with Human PDGFRA
Target	PDGFRA
Immunogen	Recombinant Human PDGFRA/CD140a Protein
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Clone	NN18
Purification	Protein A purified
Conjugate	Unconjugated
Applications	ELISA(cap) This antibody will detect PDGFRA in antibody pair set. [ABPR-ZB101]
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human PDGFRA / CD140a. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Format	Purified, Liquid
Concentration	Lot specific
Size	50 µL, 100 µL, 200 µL, 1 mL

Buffer	PBS
Preservative	None
Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Ship	Wet ice

BACKGROUND

Introduction PDGFRA, also known as CD140a, together with the structurally homolog protein PDGFRB (CD140b), are cell surface receptors for members of the platelet-derived growth factor family. They are members of the class III subfamily of receptor tyrosine kinase (RTKs) with the similar structure characteristics of five immunoglobulin-like domains in their extracellular region and a split kinase domain in their intracellular region. PDGFRA is expressed in oligodendrocyte progenitor cells and mesothelial cell, and binds all three ligand isoforms PDGF-AA, PDGF-BB and PDGF-AB with high affinity, whereas PDGFRB dose not bind PDGF-AA. PDGFRA plays an essential role in regulating proliferation, chemotaxis and migration of mesangial cells. Recent studies have indicated that PDGFRA acts as a critical mediator of signaling in testis organogenesis and Leydig cell differentiation, and in addition, particularly important for kidney development. Additionally, PDGFRA is involved in tumor angiogenesis and maintenance of the tumor microenvironment and has been implicated in development and metastasis of Hepatocellular carcinoma (HCC). PDGFRA may represent a potential therapeutic target in thymic tumours. PDGFRA gene amplification rather than gene mutation may be the underlying genetic mechanism driving PDGFRA overexpression in a portion of gliomas.

Keywords PDGFRA; platelet-derived growth factor receptor, alpha polypeptide; CD140A; PDGFR2

GENE INFORMATION

Synonyms PDGFRA; platelet-derived growth factor receptor, alpha polypeptide; CD140A; PDGFR2; PDGFR-2; RHEPDGFRA; platelet-derived growth factor receptor alpha; PDGF-R-alpha; CD140a antigen; PDGFRA/BCR fusion; CD140 antigen-like family member A; platelet-derived growth factor receptor 2; alpha-type platelet-derived growth factor receptor; rearranged-in-hypereosinophilia-platelet derived growth factor receptor alpha fusion protein

Entrez Gene ID [5156](#)

UniProt ID [P46108](#)