

Summary

Production Name	PDGFR- β (phospho Tyr740) Rabbit Polyclonal Antibody	
Description	Rabbit Polyclonal Antibody	
Host	Rabbit	
Application	ELISA,IHC,WB,	
Reactivity	Human,Mouse,Rat	

Performance

Conjugation	Unconjugated		
Modification	Phospho Antibody		
lsotype	lgG		
Clonality	Polyclonal		
Form	Liquid		
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw		
	cycles.		
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.		
Purification	Affinity purification		

Immunogen

Gene Name	PDGFRB	
Alternative Names	PDGFRB; PDGFR; PDGFR1; Platelet-derived growth factor receptor beta; PDGF-R-beta;	
	PDGFR-beta; Beta platelet-derived growth factor receptor; Beta-type platelet-derived	
	growth factor receptor; CD140 antigen-like family member B; Platelet-deri	
Gene ID	5159.0	
SwissProt ID	P09619.The antiserum was produced against synthesized peptide derived from human	
	PDGFR beta around the phosphorylation site of Tyr740. AA range:711-760	

Application

Dilution Ra	tio	WB 1:500 - 1:2000	IHC 1:100 - 1:300. ELISA: 1:5000
Molecular \	Veight	135-180kD	



Background

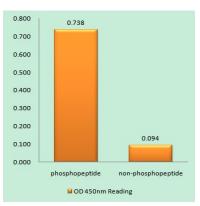
This gene encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. These growth factors are mitogens for cells of mesenchymal origin. The identity of the growth factor bound to a receptor monomer determines whether the functional receptor is a homodimer or a heterodimer, composed of both plateletderived growth factor receptor alpha and beta polypeptides. This gene is flanked on chromosome 5 by the genes for granulocyte-macrophage colony-stimulating factor and macrophage-colony stimulating factor receptor; all three genes may be implicated in the 5-g syndrome. A translocation between chromosomes 5 and 12, that fuses this gene to that of the translocation, ETV6, leukemia gene, results in chronic myeloproliferative disorder with eosinophilia. [provided by RefSeq, Jul 2008], catalytic activity: ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate., disease: A chromosomal aberration involving PDGFRB is a cause in many instances of chronic myeloproliferative disorder with eosinophilia (MPE) [MIM:131440]. Translocation t(5;12) with ETV6 on chromosome 12 creating an PDGFRB-ETV6 fusion protein., disease:A chromosomal aberration involving PDGFRB is found in a form of chronic myelomonocytic leukemia (CMML). Translocation t(5;12)(q33;p13) with EVT6/TEL. It is characterized by abnormal clonal myeloid proliferation and by progression to acute myelogenous leukemia (AML)., disease: A chromosomal aberration involving PDGFRB may be a cause of acute myelogenous leukemia. Translocation t(5;14)(q33;q32) with TRIP11. The fusion protein may be involved in clonal evolution of leukemia and eosinophilia., disease: A chromosomal aberration involving PDGFRB may be a cause of juvenile myelomonocytic leukemia. Translocation t(5;17)(q33;p11.2) with SPECC1., disease: A chromosomal aberration involving PDGFRB may be the cause of a myeloproliferative disorder (MBD) associated with eosinophilia. Translocation t(1;5)(q23;q33) that forms a PDE4DIP-PDGFRB fusion protein., function: Receptor that binds specifically to PDGFB and PDGFD and has a tyrosine-protein kinase activity. Phosphorylates Tyr residues at the C-terminus of PTPN11 creating a binding site for the SH2 domain of GRB2., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily., similarity: Contains 1 protein kinase domain.,similarity:Contains 5 Iq-like C2-type (immunoqlobulin-like) domains.,subunit:Homodimer, and heterodimer with PDGFRA. Interacts with APS. The autophosphorylated form interacts directly with SHB and with PIK3C2B, maybe indirectly.,

Research Area

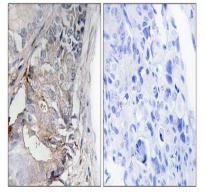
MAPK_ERK_Growth;MAPK_G_Protein;Calcium;Cytokine-cytokine receptor interaction;Focal adhesion;Gap junction;Regulates Actin and Cytoskeleton;Pathways in cancer;Colorectal cancer;Glioma;Prostate cancer;Melanoma;

Image Data

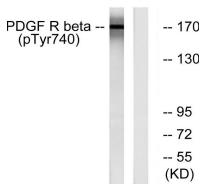




Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PDGFR beta (Phospho-Tyr740) Antibody

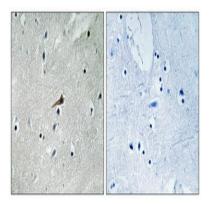


Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using PDGFR beta (Phospho-Tyr740) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells treated with EGF 200ng/ml 30 ', using PDGFR beta (Phospho-Tyr740) Antibody. The lane on the right is blocked with the phospho peptide.





Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4°,overnight) . Highpressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

Note For research use only.