

VEGFA (PT0522R) PT® Rabbit mAb

Catalog No: YM8345

Reactivity: Human; Mouse; Rat;

Applications: WB;IHC;IF;IP;ELISA

Target: VEGF-A

Fields: >>EGFR tyrosine kinase inhibitor resistance;>>MAPK signaling pathway;>>Ras

signaling pathway;>>Rap1 signaling pathway;>>Calcium signaling

pathway;>>HIF-1 signaling pathway;>>PI3K-Akt signaling pathway;>>VEGF signaling pathway;>>Focal adhesion;>>Relaxin signaling pathway;>>AGE-RAGE

signaling pathway in diabetic complications;>>Human cytomegalovirus infection;>>Human papillomavirus infection;>>Kaposi sarcoma-associated

herpesvirus infection;>>Pathways in cancer;>>Proteoglycans in

cancer;>>MicroRNAs in cancer;>>Chemical carcinogenesis - receptor

activation;>>Chemical carcinogenesis - reactive oxygen species;>>Renal cell

carcinoma;>>Pancreatic cancer;>>Bladder cancer;>>Rheumatoid

arthritis;>>Fluid shear stress and atherosclerosis

Gene Name: VEGFA

Protein Name: Vascular endothelial growth factor A

P15692

Human Gene Id: 7422

Human Swiss Prot

- Wiss Flot

No:

Mouse Gene ld: 22339

Mouse Swiss Prot

ss Prot <u>Q00731</u>

No:

Rat Gene Id: 83785

Rat Swiss Prot No: P16612

Specificity: endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA



Source: Monoclonal, rabbit, lgG, Kappa

Dilution : IHC 1:1000-1:5000;WB 1:2000-1:10000;IF 1:200-1:1000;ELISA

1:5000-1:20000;IP 1:50-1:200;

Purification: Protein A

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 27kD

Observed Band: 40kD

Cell Pathway: Cytokine-cytokine receptor interaction;mTOR;VEGF;Focal adhesion;Pathways

in cancer;Renal cell carcinoma;Pancreatic cancer;Bladder cancer;

Background: This gene is a member of the PDGF/VEGF growth factor family. It encodes a

heparin-binding protein, which exists as a disulfide-linked homodimer. This growth factor induces proliferation and migration of vascular endothelial cells, and is essential for both physiological and pathological angiogenesis. Disruption of this gene in mice resulted in abnormal embryonic blood vessel formation. This gene is upregulated in many known tumors and its expression is correlated with tumor stage and progression. Elevated levels of this protein are found in patients with POEMS syndrome, also known as Crow-Fukase syndrome. Allelic variants of this gene have been associated with microvascular complications of diabetes 1 (MVCD1) and atherosclerosis. Alternatively spliced transcript variants encoding different isoforms have been described. There is also evidence for alternative

translation initiation fro

Function: function:Growth factor active in angiogenesis, vasculogenesis and endothelial

cell growth. Induces endothelial cell proliferation, promotes cell migration, inhibits

apoptosis, and induces permeabilization of blood vessels. Binds to the VEGFR1/Flt-1 and VEGFR2/Kdr receptors, heparan sulfate and heparin.

Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to VEGFR2/Kdr but doesn't activate downstream signaling pathways, doesn't activate angiogenesis and inhibits tumor growth.,induction:Regulated by growth factors, cytokines, gonadotropins, nitric oxide, hypoxia, hypoglycemia and oncogenic mutations.,online information:VEGF entry,similarity:Belongs to the PDGF/VEGF growth factor family.,subcellular location:VEGF121 is acidic and freely secreted. VEGF165 is more basic, has heparin-binding properties and,

although a signicant proportion remains cell-associated, most is f

Subcellular Location:

Secreted

Expression: Isoform VEGF189, isoform VEGF165 and isoform VEGF121 are widely

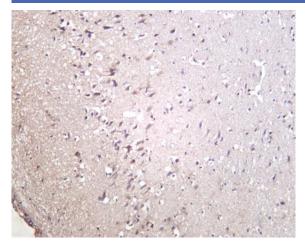
expressed. Isoform VEGF206 and isoform VEGF145 are not widely expressed. A

higher level expression seen in pituitary tumors as compared to the pituitary

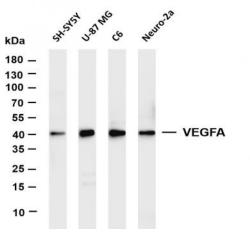


gland.

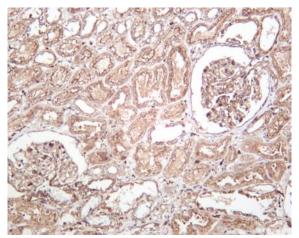
Products Images



Rat brain was stained with anti-VEGFA (PT0522R) rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-VEGFA (PT0522R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: SH-SY5Y Lane 2: U-87 MG Lane 3: C6 Lane 4: Neuro-2a Predicted band size: 27kDa Observed band size: 40kDa



Human kidney was stained with anti-VEGFA (PT0522R) rabbit antibody



Mouse brain was stained with anti-VEGFA (PT0522R) rabbit antibody