



VEGF-A Rabbit mAb

Catalog No	YP-rAb-17802
Isotype	IgG
Reactivity	Human,Mouse,Rat,Pig,Rabbit
Applications	WB,IHC,IF,ELISA
Gene Name	VEGFA
Protein Name	Vascular endothelial growth factor A
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:1000-1:5000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	VEGF-A;Vascular endothelial growth factor A;VEGFA ; VEGF ; Vascular endothelial growth factor A ; VEGF-A ; Vascular permeability factor ; VPF;VEGFA
Observed Band	40kD
Calculated Molecular Weight	27kD
Cell Pathway	Secreted
Tissue Specificity	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.
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 significant proportion remains cell-associated, most is freely secreted. VEGF189 is very basic, it is cell-associated after secretion and is bound avidly by heparin and the extracellular matrix, although it may be released as a soluble form by heparin, heparinase or plasmin.,subunit:Homodimer; disulfide-linked. Also found as heterodimer with PlGF.,tissue specificity:The VEGF189, VEGF-165 and VEGF-121 isoforms are widely expressed, whereas the VEGF206 and VEGF-145 are uncommon.,

Background

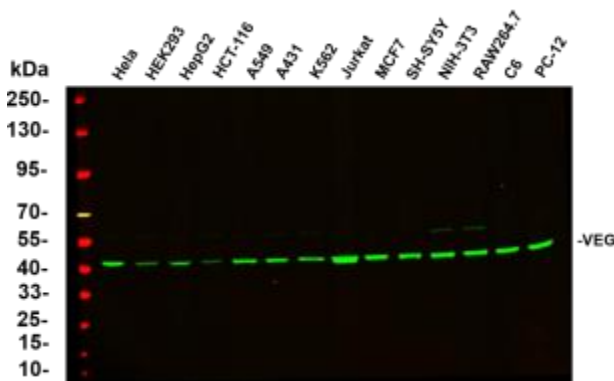
This gene is a member of the PDGF/VEGF growth factor family. It encodes a heparin-binding protein, which exists as a disulfide-linked homodimer. This growth factor induces proliferation and migration of vascular endothelial cells, and is essential for both physiological and pathological angiogenesis. 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 from

matters needing attention

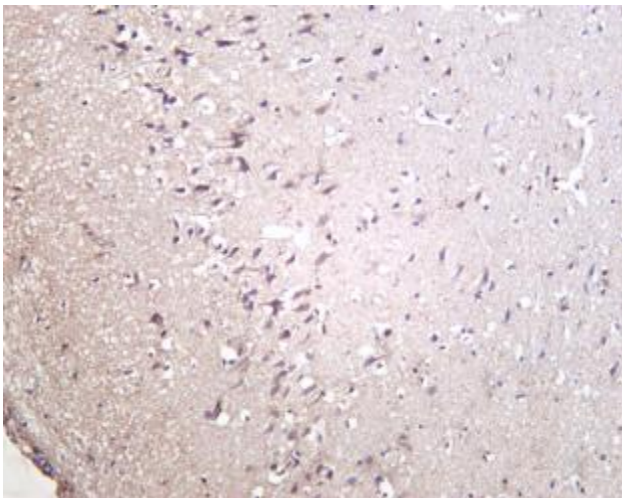
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

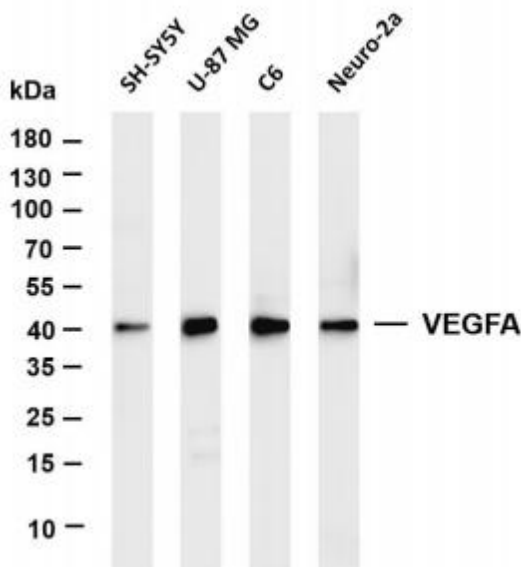


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:5000 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody

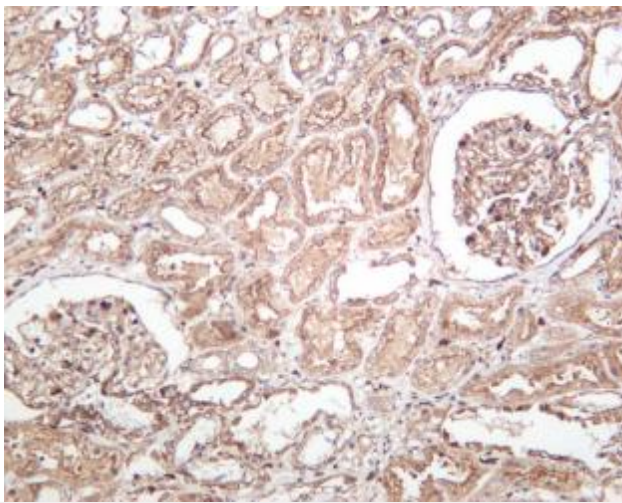


Rat brain was stained with anti-VEGFA rabbit antibody





Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-VEGFA 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 rabbit antibody



Mouse brain was stained with anti-VEGFA rabbit antibody

