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VEGFA Rabbit pAb

Catalog # AP96724

Product Information

Application	WB
Primary Accession	Q00731
Other Accession	Q00731
Reactivity	Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43131
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse VEGF
Epitope Specificity	27-120/232
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the PDGF/VEGF growth factor family.
SUBUNIT	Homodimer; disulfide-linked. Also found as heterodimer with PGF (By similarity).
DISEASE	Defects in VEGFA are a cause of susceptibility to microvascular complications of diabetes type 1 (MVCD1) [MIM:603933]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Vascular endothelial growth factor (VEGF), originally known as vascular permeability factor (VPF), is a signal protein produced by cells that stimulates the formation of blood vessels. To be specific, VEGF is a sub-family of growth factors, the platelet-derived growth factor family of cystine-knot growth factors. They are important signaling proteins involved in both vasculogenesis (the de novo formation of the embryonic circulatory system) and angiogenesis (the growth of blood vessels from pre-existing vasculature).

Additional Information

Gene ID	22339
Other Names	L-VEGF; MVCD1; VEGF; VPF; VEGF-A; VEGF111; VEGF164; VEGFA_HUMAN; VEGFA; Vascular permeability factor (VPF); VEGFA_MOUSE; VEGFA_RAT; vascular endothelial growth factor A; vascular endothelial growth factor

Dilution	WB=1:500-1000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Vegfa
Synonyms	Vegf
Function	[N-VEGF]: Participates in the induction of key genes involved in the response to hypoxia and in the induction of angiogenesis such as HIF1A (PubMed:35455969). Involved in protecting cells from hypoxia- mediated cell death (PubMed:35455969).
Cellular Location	[N-VEGF]: Cytoplasm {ECO:0000250|UniProtKB:P15692}. Nucleus {ECO:0000250|UniProtKB:P15692} Note=Cytoplasmic in normoxic conditions and localizes to the nucleus under hypoxic conditions. {ECO:0000250|UniProtKB:P15692} [Isoform L-VEGF-2]: Endoplasmic reticulum {ECO:0000250|UniProtKB:P15692}. Golgi apparatus {ECO:0000250|UniProtKB:P15692}. Secreted, extracellular space, extracellular matrix {ECO:0000250|UniProtKB:P15692} [Isoform VEGF-2]: Secreted.
Tissue Location	In developing embryos, expressed mainly in the choroid plexus, paraventricular neuroepithelium, placenta and kidney glomeruli. Also found in bronchial epithelium, adrenal gland and in seminiferous tubules of testis. High expression continues in kidney glomeruli and choroid plexus in adults

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.