ARG88009

arigoQIKTM Mouse VEGF ELISA Development Kit

Package: 1 kit(5 plates), 1 kit (15 plates)
Store at: 4°C, -20°C

Summary

Product Description	ARG88009 arigoQIK™ Mouse VEGF ELISA Development Kit, includes Capture antibody, Detection antibody, Standard, and HRP-Streptavidin Solution. This ELISA Development Kit is designed for the development of sandwich ELISA to measure Mouse VEGF in serum, plasma and cell culture supernatants. For other reagents required for arigoQIK™ ELISA Development Kit, please refer ARG83524 Integral Reagent Kit (ELISA Development Kit) More about arigoQIK™: ● Optimized capture and detection antibody pairs ● Reduced incubation time and wash cycles ● 2-hour quicker than conventional ELISA process ● 5- and 15-plate packages available
Tested Reactivity	Ms
Tested Application	ELISA
Target Name	VEGF
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	11.72 pg/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	23.44 - 1500pg/ml
Sample Volume	50 µl
Alternate Names	EGFA; Vascular Endothelial Growth Factor A; VPF; VEGF; Vascular Endothelial Growth Factor A, Long Form; Vascular Permeability Factor; VEGF-A; L-VEGF; Vascular Endothelial Growth Factor A121; Vascular Endothelial Growth Factor A165; Vascular Endothelial Growth Factor; MVCD1

Properties

Storage instruction	Store components at 4°C or -20°C. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail tempeMouseures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	VEGFA
Gene Full Name	Vascular Endothelial Growth Factor A
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 prolifeMouseion and migMouseion 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 upstream non-AUG (CUG) codons resulting in additional isoforms. A recent study showed that a C-terminally extended isoform is produced by use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism, and that this isoform is antiangiogenic. Expression of some isoforms derived from the AUG start codon is regulated by a small upstream open reading frame, which is located within an internal ribosome entry site. The levels of VEGF are increased during infection with severe acute respiMouseory syndrome coronavirus 2 (SARS-CoV-2), thus promoting inflammation by facilitating recruitment of inflammatory cells, and by increasing the level of angiopoietin II (Ang II), one of two products of the SARS-CoV-2 binding target, angiotensin-converting enzyme 2 (ACE2). In turn, Ang II facilitates the elevation of VEGF, thus forming a vicious cycle in the release of inflammatory cytokines. [provided by RefSeq, Jun 2020]
Function	Induces endothelial cell prolifeMouseion, promotes cell migMouseion, inhibits apoptosis and induces permeabilization of blood vessels. Binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. Binds to the NRP1/neuropilin-1 receptor. Binding to NRP1 initiates a signaling pathway needed for motor neuron axon guidance and cell body migMouseion, including for the caudal migMouseion of facial motor neurons from rhombomere 4 to rhombomere 6 during embryonic development. [Uniprot]
Highlight	Related news: arigoQIK, DIY your sandwich ELISA kits;
PTM	Disulfide bond, Glycoprotein. [Uniprot]
Cellular Localization	Cytoplasm, Endoplasmic reticulum, Extracellular matrix, Golgi appaMouseus, Nucleus, Secreted. [Uniprot]