

Datasheet for ABIN2735218

VEGFA Protein (Transcript Variant 2)[Go to Product page](#)**1** Image

Overview

Quantity:	10 µg
Target:	VEGFA
Protein Characteristics:	Transcript Variant 2
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Antibody Production (AbP), Functional Studies (Func), Standard (STD), Protein Interaction (PI)

Product Details

Specificity:	Optimal preservation of protein structure, post-translational modifications and functions.
Characteristics:	• Recombinant human VEGF-A (transcript variant 2) protein expressed in HEK293. • Produced with end-sequenced ORF clone • Tested for bioactivity.
Purity:	> 98 % , as determined by Coomassie stained SDS-PAGE.
Endotoxin Level:	Less than 0.01 ng per µg protein as determined by the LAL method.
Biological Activity Comment:	The ED50 is 1 - 6 ng/ml, corresponding to a specific activity of 0.16 - 1.0 x 10 ⁶ units/mg, determined by the dose dependent stimulation of HUVEC cells proliferation.

Target Details

Target:	VEGFA
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Target Details

Alternative Name: Vegf-A ([VEGFA Products](#))

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 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.

Molecular Weight: 19 kDa

NCBI Accession: [NP_003367](#)

Pathways: [RTK Signaling](#), [Glycosaminoglycan Metabolic Process](#), [Regulation of Cell Size](#), [Tube Formation](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Platelet-derived growth Factor Receptor Signaling](#), [VEGFR1 Specific Signals](#), [VEGF Signaling](#)

Application Details

Application Notes: Recombinant human proteins can be used for:

- Native antigens for optimized antibody production
- Positive controls in ELISA and other antibody assays
- Protein-protein interaction
- In vitro biochemical assays and cell-based functional assays

Restrictions: For Research Use only

Handling

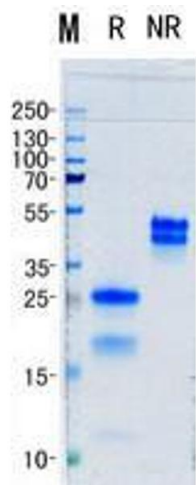
Concentration: > 50 µg/mL

Buffer: 5 mM citric acid, 5 mM NaHPO₄, 0.15 M NaCl pH 4.0

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C. Thaw on ice, aliquot to individual single-use tubes, and then re-freeze immediately. Only 2-3 freeze thaw cycles are recommended.

Images



Western Blotting

Image 1. Validation with Western Blot