

For Research Use Only

NeutraKine® VEGF165/121 Monoclonal antibody



Catalog Number: 69025-1-Ig **1 Publications**

Basic Information

| | | |
|---|---|---|
| Catalog Number: 69025-1-Ig | GenBank Accession Number: 7422 | Purification Method: Protein G purification |
| Size: Source: Mouse | GeneID (NCBI): 7422 | CloneNo.: 6C3D5 |
| Isotype: IgG1 | Full Name: vascular endothelial growth factor A | |
| Immunogen Catalog Number: HZ-1038 | | |

Applications

Tested Applications:
Neutralization, ELISA

Cited Applications:
ELISA

Species Specificity:
Human

Cited Species:
human

Background Information

VEGFA, also named as VEGF or VPF, belongs to the PDGF/VEGF growth factor family. It is a growth factor active in angiogenesis, vasculogenesis and endothelial cell growth. VEGFA induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis and induces permeabilization of blood vessels. It binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. Defects in VEGFA are associated with microvascular complications of diabetes type 1 (MVCD1). VEGFA has 17 isoforms with MW from 16 to 45 kDa. Some isoforms have homodimer forms (e.g.; VEGFA189 38 kDa or VEGFA110 34 kDa). VEGF-A exists in at least seven homodimeric isoforms. The monomers consist of 121, 145, 148, 165, 183, 189, or 206 amino acids (PMID:15602010).

This antibody is used to neutralize the bioactivity of VEGF165/121. ELISA test suggests that this antibody recognize VEGF165 and VEGF121. According to sequence similarity, it may recognize other isoforms.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|-------------|-----------|--------------|-------------|
| Xueying Fan | 37062842 | J Transl Med | ELISA |

Storage

Storage:
Lyophilized antibodies are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at(4°C) for short term or at(-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.

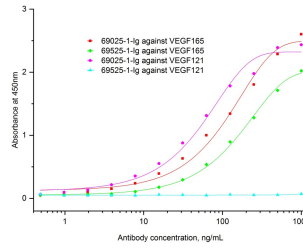
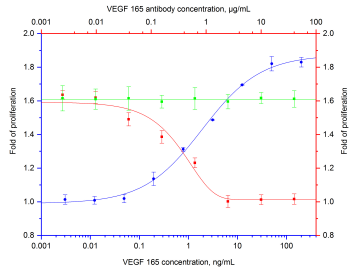
Storage Buffer:
Sterile PBS.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
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Selected Validation Data



Recombinant human VEGF165 (Cat.NO. HZ-1038) stimulates proliferation of HUVEC (human umbilical vein endothelial) cell line in a dose-dependent manner (blue curve, refer to bottom X-left Y axis). The activity of human VEGF165 (10 ng/mL HZ-1038) is neutralized by mouse anti-human VEGF165/121 monoclonal antibody 69025-1-Ig at serial dose (red curve, refer to top X-right Y axis). The ND50 is typically 0.5-2 µg/mL. The NeutraControl mouse anti-human VEGF165



Indirect ELISA was carried out by coating recombinant Human VEGF165 (Cat.NO. HZ-1038) and VEGF121 (Cat.NO. HZ-1204) respectively at 70 ng/well followed by blocking and adding serial diluted VEGF165/121 antibody 69025-1-Ig and VEGF165 antibody 69525-1-Ig respectively. HRP-goat anti-mouse was used for detection. Signal was developed with TMB and stopped by H₂SO₄. Signal strength was measured by absorbance at 450 nm. The result suggests that

