

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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VEGFR Blocker

Catalog: 102019

Lot: 231026

**Product Information** 

**Description:** VEGFR Blocker is a fusion protein composed of the extracellular domain that binds to

VEGF (vascular endothelial growth factor) of VEGFR1 (vascular endothelial growth factor receptor 1), the extracellular domain that binds to VEGF of VEGFR2 and the Fc domain of human IgG1. This protein was affinity purified. VEGF Blocker is similar to

Aflibercept.

Background: VEGF165 (Vascular Endothelial Growth Factor 165), a potent isoform of VEGF-A,

belongs to the VEGF family of homodimer glycoproteins and is produced and secreted by various cells when angiogenesis is required. Angiogenesis involves endothelial cell proliferation, migration, and formation of blood vessels, which under normal conditions serve to provide nutrients and oxygen to tissues during development or wound healing. However, tumor cells can promote new blood vessel formation by secreting proangiogenesis factors. VEGF-A can bind to both VEGFR1 (Vascular Endothelial Growth Factor Receptor 1) and VEGFR2, also known as KDR (kinase insert domain receptor), on the surface of endothelial cells or cancer cells. VEGFR2 is considered the main signaling receptor, while VEGFR1 leads to a weak signaling and can be seen as a decoy receptor. Ligand binding induces VEGFR2 receptor dimerization and activates its tyrosine kinase activity. As a result, multiple downstream signaling cascades, including the MAPK (mitogen activated protein kinase) pathway, get activated. The VEGF-VEGFR signal pathway has been a significant target in therapeutic strategies aimed at controlling angiogenesis in diseases like cancer and AMD (age macular degeneration), and several small molecules, neutralizing antibodies and blockers have been FDA-approved. However, the development of drug resistance is still a challenge. The use of combinatory therapy or development of new generation drugs will continue to benefit

cancer therapy. Human

Species:HumanConcentration:2.87 mg/mlExpression System:HEK293Purity:≥90%

**Format:** Aqueous buffer solution.

Formulated In: 8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol

MW: 49 kDa + glycans

**Glycosylation:** This protein runs at a higher MW by SDS-PAGE due to glycosylation.

**Stability:** At least 12 months at -80°C.

Storage: -80°C

**Instructions for Use:** Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before

opening. Aliquot into small volumes and flash freeze for long term storage. Avoid

multiple freeze/thaw cycles.

Assay Conditions: Assay was done according to VEGFR1: VEGF165 [Biotinylated] Inhibitor Screening

Chemiluminescence Assay Kit (#82632) with various amounts of VEGF Blocker.

**Applications:** Useful for studying the neutralization of VEGFR in ELISA and in cellular assays.

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**Quality Control Data** 

# 4-20% SDS-PAGE Coomassie Staining

# 1 2 - 250 kDa - 150 kDa - 100 kDa - 75 kDa - 50 kDa - 37 kDa - 25 kDa - 20 kDa - 15 kDa - 10 kDa - 10 kDa

### VEGFR1: VEGF165 [Biotinylated]



