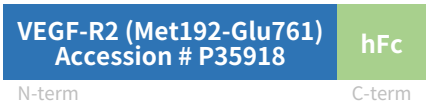
Rev04
Update: Mar,01,2022

DATASHEET

VEGF-R2 Fc Chimera, Mouse

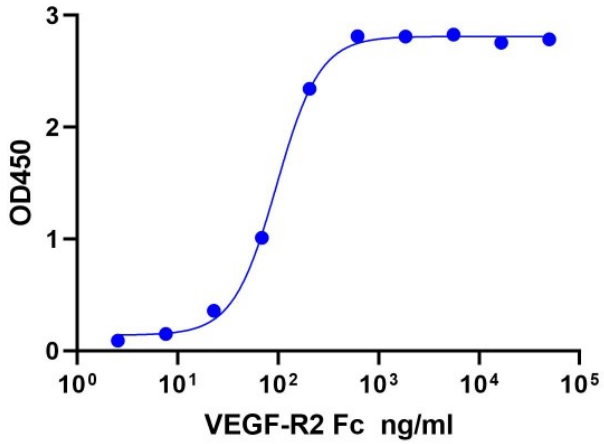
Cat. No.: Z03555

Product Introduction

Species	Mouse
Protein Construction	
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 1 EU/μg of protein by gel clotting method
Biological Activity	Immobilized Mouse VEGF164 at 2.0 μg/ml (100 μl/well) can bind VEGF-R2, hFc, Mouse with EC_{50}=96.15 ng/ml when detected by Mouse Anti Human IgG Fc-HRP.
Expression System	HEK 293
Apparent Molecular Weight	~153.5 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Examples

GenScript USA, Inc.
860 Centennial Ave. Piscataway, NJ 08854
Tel: 1-732-885-9188



Immobilized VEGF164, Mouse at 2 μg/ml (100 μl/well) can bind Mouse VEGF-R2 Fc Chimera with EC50=96.15 ng/ml when detected by Mouse Anti Human IgG Fc-HRP. Background was subtracted from data points before curve fitting.

Background

Target Background : VEGF-R2 belongs to a family of proteins called receptor tyrosine kinases. The receptor has three main parts: one part extends out of the cell and binds to VEGF, another spans the cell’ s membrane, while the third part is found inside the cell. The current model of VEGF-R2 activation is that VEGF binds to individual VEGF-R2 receptor proteins on the membrane, and brings two of them close enough to form a complex called a dimer. The receptor dimer is activated and initiates signaling within the cell. VEGF-R2 is a receptor tyrosine kinase (RTK) which transduces biochemical signals via lateral dimerization in the plasma membrane. Like most RTKs, VEGF-R2 is composed of an extracellular (EC) domain, a transmembrane (TM) domain, and an intracellular (IC) domain consisting of a kinase domain and sequences required for downstream signaling. The EC domain consists of seven immunoglobulin homology (Ig) domains, termed D1 (at the N-terminus) to D7 (closest to the membrane). VEGF-R2 binds to, and is activated by the ligands VEGF-A, VEGF-E, and a number of processed forms of VEGF-C and VEGF-D. Ligand binding to VEGF-R2 is mediated by Ig-domains 2 and 3 and the linker between D2 and D3.

Synonyms : KDR, CD309, FLK1, VEGFR, VEGFR2

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