

Recombinant Human VEGF165/VEGFA Protein

Catalog Number: PKSH033475

Note: Centrifuge before opening to ensure complete recovery of vial contents.

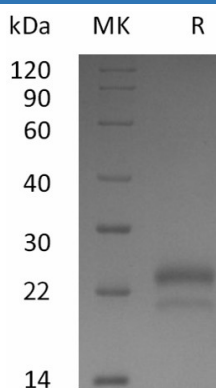
Description

| | |
|----------------------|--|
| Species | Human |
| Source | HEK293 Cells-derived Human VEGF165/VEGFA protein Ala27-Arg191 |
| Calculated MW | 19.1 kDa |
| Observed MW | 18-24 kDa |
| Accession | P15692-4 |
| Bio-activity | Immobilized Human VEGF165 (PKSH033475) at 10µg/ml (100 µl/well) can bind Human VEGFR1-Fc (PKSH033445). The ED ₅₀ of Recombinant Human VEGFR1-Fc (PKSH033445) is 36.4 ng/ml. |

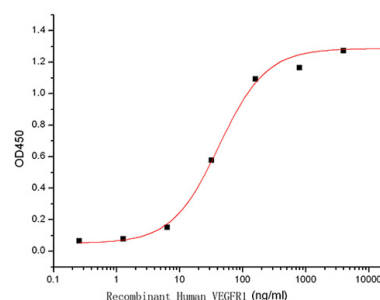
Properties

| | |
|-----------------------|---|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 0.01 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from a 0.2 µm filtered solution of 20mM Citrate, 8% Sucrose, 4% Mannitol, 0.05% Tween 80, pH4.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

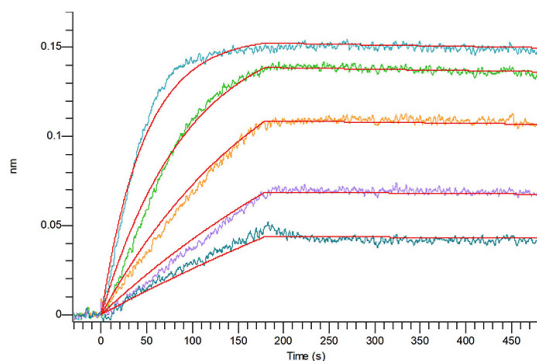
Data



> 95 % as determined by reducing SDS-PAGE.



Immobilized Human VEGF165 (PKSH033475) at 10µg/ml (100 µl/well) can bind Human VEGFR1-Fc (PKSH033445).
The ED₅₀ of Recombinant Human VEGFR1-Fc (PKSH033445) is 36.4 ng/ml.



Loaded Brolucizumab on AMC Biosensor, can bind Recombinant Human VEGF165 (PKSH033475) with an affinity constant of 22.2 pM as determined in BLI assay.

Background

Human Vascular endothelial growth factor (VEGF); also known as VEGF-A and vascular permeability factor (VPF); belongs to the platelet-derived growth factor family of cysteine-knot growth factors. It is a potent activator in vasculogenesis and angiogenesis both physiologically and pathologically. VEGF-A has 8 differently spliced isoforms; of which VEGF165 is the most abundant one. VEGF165 is a disulfide-linked homodimer consisting of two glycosylated 165 amino acid polypeptide chains. VEGF stimulates the cellular response through binding to tyrosine kinase receptors VEGFR1 and VEGFR2 on the cell surface. It is widely accepted that VEGFR2 mediate almost all of the known cellular responses to VEGF while the function of VEGFR1 is less defined and is thought to modulate the VEGFR2 signaling.