

DESCRIPTION	
Species Reactivity	Human/Primate
Specificity	Detects human VEGF ₁₆₅ and human VEGF ₁₂₁ in ELISAs and Western blots. In ELISAs, approximately 10% cross-reactivity with recombinant mouse (rm) VEGF and recombinant rat (rr)VEGF and no cross-reactivity with recombinant human (rh) VEGF-D is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 26503
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human VEGF ₁₆₅ Ala27-Arg191 Accession # NP_001165097.1
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS	
Please Note: Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.	
	Recommended Concentration Sample
Western Blot	1 µg/mL See Below
Human/Primate VEGF Sandwich Immunoassay	Reagent
ELISA Capture	Human/Primate VEGF Antibody (Catalog # MAB293)
ELISA Detection	Human/Primate VEGF ₁₆₅ Biotinylated Antibody (Catalog # BAF293)
Standard	Recombinant Human VEGF ₁₆₅ (Catalog # 293-VE)
Neutralization	Measured by its ability to neutralize VEGF ₁₆₅ -induced proliferation in HUVEC human umbilical vein endothelial cells. The Neutralization Dose (ND ₅₀) is typically 10-60 ng/mL in the presence of 10 ng/mL Recombinant Human VEGF ₁₆₅ .

DATA	
<p>Western Blot</p>	<p>Detection of Recombinant Human VEGF by Western Blot. Western blot shows 25 ng of Recombinant Human VEGF₁₆₅ (Catalog # 293-VE), Recombinant Human VEGF₁₁₁ (Catalog # 5336-VE), Recombinant Human VEGF₁₂₁, aa 207-327 (Catalog # 4644-VS), Recombinant Human VEGF₁₄₅ (aa 27-171) (Catalog # 7626-VE), Recombinant Human VEGF₁₆₂ (Catalog # 2347-VE), Recombinant Human VEGF_{165b} (Catalog # 3045-VE), Recombinant Human VEGF₁₈₀ (aa 27-215) (Catalog # 8147-VE), Recombinant Human VEGF₁₆₅ Extended Isoform (Catalog # 9018-VE), Recombinant Human VEGF-B₁₆₇ (Catalog # 751-VE), Recombinant Mouse VEGF₁₆₄ (Catalog # 493-MV), and Recombinant Rat VEGF₁₆₄ (Catalog # 564-RV). PVDF Membrane was probed with 0.1 µg/mL of Mouse Anti-Human/Primate VEGF Monoclonal Antibody (Catalog # MAB293) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for VEGF at approximately 15-25 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 3.</p>
<p>Neutralization</p>	<p>Cell Proliferation Induced by VEGF₁₆₅ and Neutralization by Human VEGF Antibody. Recombinant Human VEGF₁₆₅ (Catalog # 293-VE) stimulates proliferation in HUVEC human umbilical vein endothelial cells in a dose-dependent manner (orange line) as measured by Resazurin (Catalog # AR002). Proliferation elicited by Recombinant Human VEGF₁₆₅ (10 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human/Primate VEGF Monoclonal Antibody (Catalog # MAB293). The ND₅₀ is typically 10-60 ng/mL.</p>

PREPARATION AND STORAGE	
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

VEGF is a soluble protein secreted by a wide variety of cell types. It binds to the receptor tyrosine kinases VEGF R1 (Flt-1) and VEGF R2 (Flk-1). VEGF stimulates vascular endothelial cell proliferation and is a potent inducer of angiogenesis. Several VEGF isoforms occur resulting from alternative mRNA splicing.