

DESCRIPTION	
Species Reactivity	Human/Primate
Specificity	Detects human VEGF ₁₆₅ and human VEGF ₁₂₁ in direct ELISAs and Western blots. In ELISAs, this antibody shows approximately 10% cross-reactivity with recombinant mouse (rm) VEGF and rVEGF and no cross-reactivity with rhVEGF-D.
Source	Recombinant Monoclonal Mouse IgG _{2B} Clone # 26503R
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human VEGF ₁₆₅ Ala27-Arg191 Accession # NP_001165097
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Human/Primate VEGF Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Human/Primate VEGF Antibody (Catalog # MAB293R)
ELISA Detection	0.1-0.4 µg/mL	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

Western Blot

Detection of Human VEGF by Western Blot. Western blot shows lysates of human lung tissue. PVDF membrane was probed with 2 µg/mL of Recombinant Mouse Anti-Human/Primate VEGF Monoclonal Antibody (Catalog # MAB293R) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for VEGF at approximately 25 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry

VEGF in Human Liver. VEGF was detected in immersion fixed paraffin-embedded sections of human liver using Recombinant Mouse Anti-Human/Primate VEGF Monoclonal Antibody (Catalog # MAB293R) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in hepatocytes. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

Neutralization

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 Recombinant Mouse Anti-Human/Primate VEGF Monoclonal Antibody (Catalog # MAB293R). The ND₅₀ is typically 10-60 ng/mL.

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.

- 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.