

DESCRIPTION	
<b>Species Reactivity</b>	Human/Primate
<b>Specificity</b>	Detects human VEGF <sub>165</sub> and human VEGF <sub>121</sub> 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.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 26503
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human VEGF <sub>165</sub> Ala27-Arg191 Accession # NP_001165097.1
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	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		
<b>Please Note:</b> 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.		
	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Human/Primate VEGF Sandwich Immunoassay</b>		
<b>ELISA Capture</b>	2-8 µg/mL	Human/Primate VEGF Antibody (Catalog # MAB293)
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Human/Primate VEGF <sub>165</sub> Biotinylated Antibody (Catalog # BAF293)
<b>Standard</b>		Recombinant Human VEGF <sub>165</sub> (Catalog # 293-VE)
<b>Neutralization</b>	Measured by its ability to neutralize VEGF <sub>165</sub> -induced proliferation in HUVEC human umbilical vein endothelial cells. The Neutralization Dose (ND <sub>50</sub> ) is typically 10-60 ng/mL in the presence of 10 ng/mL Recombinant Human VEGF <sub>165</sub> .	

DATA	
<p><b>Western Blot</b></p> <p><b>Detection of Recombinant Human VEGF by Western Blot.</b> Western blot shows 25 ng of Recombinant Human VEGF<sub>165</sub> (Catalog # 293-VE), Recombinant Human VEGF<sub>111</sub> (Catalog # 5336-VE), Recombinant Human VEGF<sub>121</sub>, aa 207-327 (Catalog # 4644-VS), Recombinant Human VEGF<sub>145</sub> (aa 27-171) (Catalog # 7626-VE), Recombinant Human VEGF<sub>162</sub> (Catalog # 2347-VE), Recombinant Human VEGF<sub>165b</sub> (Catalog # 3045-VE), Recombinant Human VEGF<sub>180</sub> (aa 27-215) (Catalog # 8147-VE), Recombinant Human VEGF<sub>165</sub> Extended Isoform (Catalog # 9018-VE), Recombinant Human VEGF-B<sub>167</sub> (Catalog # 751-VE), Recombinant Mouse VEGF<sub>164</sub> (Catalog # 493-MV), and Recombinant Rat VEGF<sub>164</sub> (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><b>Neutralization</b></p> <p><b>Human/Primate VEGF Antibody (ng/mL)</b></p> <p><b>Cell Proliferation Induced by VEGF<sub>165</sub> and Neutralization by Human VEGF Antibody.</b> Recombinant Human VEGF<sub>165</sub> (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 VEGF<sub>165</sub> (10 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human/Primate VEGF Monoclonal Antibody (Catalog # MAB293). The ND<sub>50</sub> is typically 10-60 ng/mL.</p>

PREPARATION AND STORAGE	
<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.