

## DESCRIPTION

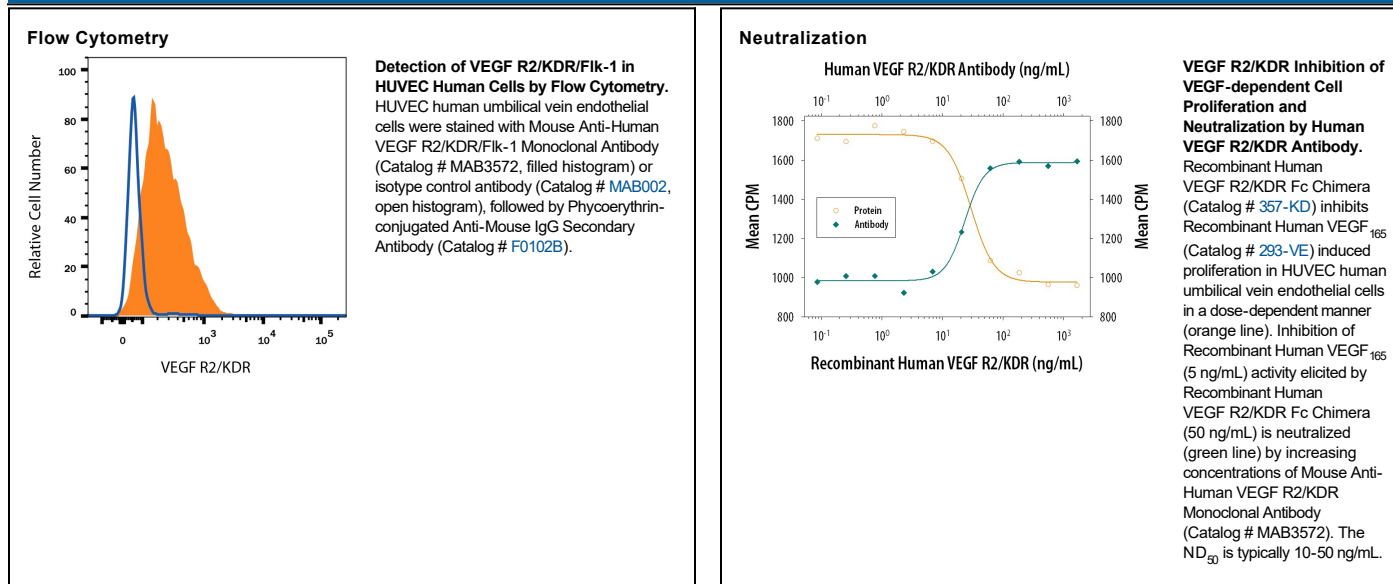
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human VEGF R2/KDR/FIk-1 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) VEGF R1, rhVEGF R3 or recombinant mouse VEGF R2 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 89106
<b>Purification</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 R2/KDR/FIk-1 Ala20-Glu764 Accession # P35968
<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

**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
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
<b>Neutralization</b>	Measured by its ability to neutralize VEGF R2/KDR/FIk-1-mediated inhibition of proliferation in HUVEC human umbilical vein endothelial cells. The Neutralization Dose (ND <sub>50</sub> ) is typically 10-50 ng/mL in the presence of 50 ng/mL Recombinant Human VEGF R2/KDR/FIk-1 Fc Chimera and 5 ng/mL Recombinant Human VEGF <sub>165</sub> .	

## DATA



## 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 R2 (KDR/Flk-1), VEGF R1 (Flt-1) and VEGF R3 (Flt-4) belong to the class III subfamily of receptor tyrosine kinases (RTKs). All three receptors contain seven immunoglobulin-like repeats in their extracellular domains and kinase insert domains in their intracellular regions. The expression of VEGF R1, 2, and 3 is almost exclusively restricted to the endothelial cells. These receptors are likely to play essential roles in vasculogenesis and angiogenesis. Mature VEGF R2 is composed of a 745 aa extracellular domain, a 25 aa transmembrane domain and a 567 aa cytoplasmic domain. In contrast to VEGF R1 which binds both P/IGF and VEGF with high affinity, VEGF R2 binds VEGF but not P/IGF with high affinity. The recombinant soluble VEGF R2/Fc chimera binds VEGF with high affinity and is a potent VEGF antagonist.

## References:

1. Ferra, N. and R. Davis-Smyth (1997) *Endocrine Reviews* **18**:4.