

Mouse VEGF R2/KDR/Flk-1 Antibody

Monoclonal Rat IgG₁ Clone # 522302

Catalog Number: MAB4432

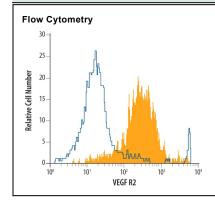
| DESCRIPTION | | | |
|--------------------|--|--|--|
| Species Reactivity | Mouse | | |
| Specificity | Detects mouse VEGF R2/KDR/Flk-1. | | |
| Source | Monoclonal Rat IgG ₁ Clone # 522302 | | |
| Purification | Protein A or G purified from hybridoma culture supernatant | | |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant mouse VEGF R2/KDR/Flk-1 Ala20-Glu762 Accession # P35918 | | |
| 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. General Protocols are available in the Technical Information section on our website.

| | Recommended Concentration | Sample |
|---------------------|------------------------------|-----------|
| Flow Cytometry | 2.5 μg/10 ⁶ cells | See Below |
| Immunocytochemistry | 8-25 μg/mL | See Below |

DATA



Detection of VEGF R2/KDR/FIk-1 in bEnd.3 Mouse Cell Line by Flow Cytometry. bEnd.3 mouse endothelioma cell line was stained with Rat Anti-Mouse VEGF R2/KDR/FIk-1 Monoclonal Antibody (Catalog # MAB0432, filled histogram) or isotype control antibody (Catalog # MAB005, open histogram), followed by Allophycocyanin-conjugated Anti-Rat IgG F (ab¹)₂ Secondary Antibody (Catalog # F0113).

Immunocytochemistry

VEGF R2/KDR/Flk-1 in bEnd.3 Mouse Cell Line. VEGF R2/KDR/Flk-1 was detected in immersion fixed bEnd.3 mouse endothelioma cell line using 10 µg/mL Rat Anti-Mouse VEGF R2/KDR/Flk-1 Monoclonal Antibody (Catalog # MAB4432) for 3 hours at room temperature. Cells were stained with the NorthernLights ™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

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

- 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 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 endothelial cells. These receptors are likely to play essential roles in vasculogenesis and angiogenesis. Mature mouse VEGF R2 is composed of a 743 amino acid (aa) extracellular domain, a 22 aa transmembrane domain, and a 583 aa cytoplasmic domain. In contrast to VEGF R1 which binds both PIGF and VEGF with high affinity, VEGF R2 binds VEGF but not PIGF with high affinity.

References:

- 1. Ferra, N. and R. Davis-Smyth (1997) Endocrine Reviews 18:4.
- 2. Achen, M.G. et al. (1998) Proc. Natl. Acad. Sci. USA 95:548.

