



Anti-Human VEGFR-2 [KDR], Antagonistic (#6B11)

20220518DS



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

| | |
|------------------|----------------------------|
| Cat.-no.: | mV1001.1m-h |
| Size: | 100 µg |
| Lot. No.: | According to product label |

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse immunized with purified human VEGFR2 N-terminal fragment (AA N30-200)).

Target Background

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|---------------------------|--|
| Synonyms (Target): | vascular endothelial growth factor receptor-2 ; KDR; FLK1; CD309; VEGF receptor 2; kinase insert domain protein receptor |
|---------------------------|--|

VEGF R1 (Flt-1), VEGF R2 (KDR/Flk-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 domain and kinase insert domains in their intracellular region. They are best known for regulating VEGF family-mediated vasculogenesis, angiogenesis, and lymphangiogenesis. They are also mediators of neurotrophic activity and regulators of hematopoietic development. Human VEGF R2 is thought to be the primary inducer of VEGF-mediated blood vessel growth, while VEGF R3 plays a significant role in VEGF-C and VEGF-D-mediated lymphangiogenesis. The antibody will bind near the ligand binding site of the receptor and has antagonistic activity by blocking the binding of natural ligands.

Database References Target

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|------------------------|-------------|
| Protein RefSeq: | NP_002244.1 |
| Uniprot ID: | P35968 |
| mRNA RefSeq: | NM_002253.2 |

Product Specifications

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|------------------------------|---------------------------------------|
| Host | Mouse |
| Reactivity against | Human |
| Clonality | Monoclonal Antibody |
| Clone | (#6B11) |
| Isotype | IgG1 |
| Purification | Protein G chromatography |
| Antigen | hVEGFR2 N-terminal fragment (N30-200) |
| Formulation | lyophilized |
| Reconstitution buffer | PBS (sterile) |

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody recognizes hVEGFR-2 in western blot and it shows no cross-reactivity with human VEGFR-1.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

The antibody can be used within the following applications:

WB, Attenuation of VEGF-induced KDR tyrosine phosphorylation

Recommended usage:

WB: Yes

Attenuation of VEGF-induced VEGFR-2 tyrosine phosphorylation

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



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Application/Handling

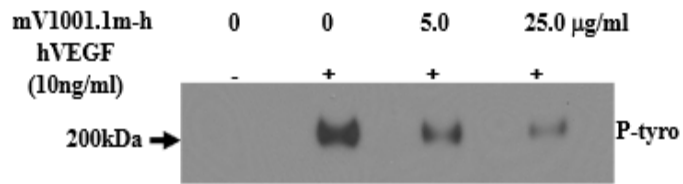


Fig. 1: HUVECs were pre-treated with 5.0, 25 $\mu\text{g/ml}$ mV1001.1m-h for 30 min and then stimulated with rh VEGF (10ng/ml) for 30min. The phospho-VEGFR2 was detected with IP-Western for P-Tyrosine.