

## Product datasheet

# Anti-VEGF Receptor 2 antibody [3D09] $\alpha$ b42230

[1 References](#) [1 Image](#)

### Overview

<b>Product name</b>	Anti-VEGF Receptor 2 antibody [3D09]
<b>Description</b>	Rat monoclonal [3D09] to VEGF Receptor 2
<b>Host species</b>	Rat
<b>Specificity</b>	This antibody shows no cross-reactivity with VEGF Receptor 1.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, Functional Studies
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse
<b>Immunogen</b>	Purified fragment, corresponding to N terminal amino acids 30-200 of Mouse VEGF Receptor 2
<b>Positive control</b>	Mouse skin endothelial cells (mSENDs)

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	3D09
<b>Isotype</b>	IgG2a

### Applications

Our [Abpromise guarantee](#) covers the use of **ab42230** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

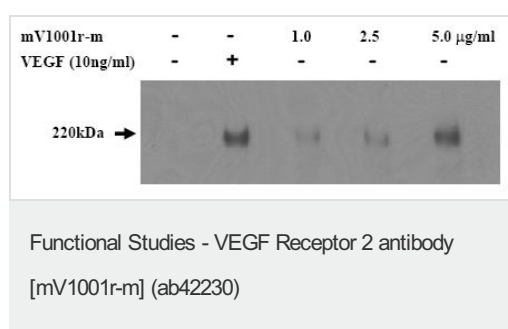
Application	Abreviews	Notes
WB		Use at an assay dependent dilution. Predicted molecular weight: 153 kDa.
IP		Use at an assay dependent dilution.

Application	Abreviews	Notes
Functional Studies		Use a concentration of 1 - 5 µg/ml. Can induce VEGF Receptor 2 tyrosine phosphorylation in mouse skin endothelial cells.

## Target

<b>Function</b>	Receptor for VEGF or VEGFC. Has a tyrosine-protein kinase activity. The VEGF-kinase ligand/receptor signaling system plays a key role in vascular development and regulation of vascular permeability. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.
<b>Involvement in disease</b>	Defects in KDR are associated with susceptibility to hemangioma capillary infantile (HCI) [MIM:602089]. HCI are benign, highly proliferative lesions involving aberrant localized growth of capillary endothelium. They are the most common tumor of infancy, occurring in up to 10% of all births. Hemangiomas tend to appear shortly after birth and show rapid neonatal growth for up to 12 months characterized by endothelial hypercellularity and increased numbers of mast cells. This phase is followed by slow involution at a rate of about 10% per year and replacement by fibrofatty stroma.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily. Contains 7 Ig-like C2-type (immunoglobulin-like) domains. Contains 1 protein kinase domain.
<b>Post-translational modifications</b>	Phosphorylated. Dephosphorylated by PTPRB. Dephosphorylated by PTPRJ at Tyr-951, Tyr-996, Tyr-1054, Tyr-1059, Tyr-1175 and Tyr-1214.
<b>Cellular localization</b>	Membrane.

## Images



Mouse skin endothelial cells (mSENDS) were stimulated with ab42230 or VEGF for 30min. Phospho-VEGF Receptor 2 was detected with anti-phosphotyrosine antibody.

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