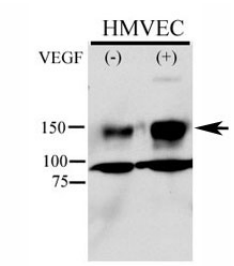
Phospho-KDR pY996 Antibody / Phospho-VEGFR2 Antibody (F48399)

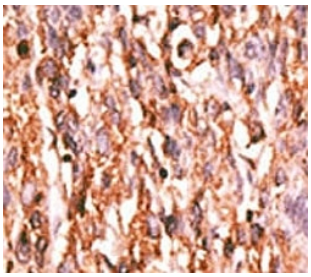
Catalog No.	Formulation	Size
F48399-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48399-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P35968
Localization	Cytoplasmic and cell surface
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:50-1:100
Limitations	This Phospho-KDR pY996 Antibody / Phospho-VEGFR2 Antibody is available for research use only.



Phospho-KDR pY996 Antibody in HeLa Cells WB. Western blot testing of HeLa cell lysate with Phospho-KDR pY996 Antibody. A prominent high-molecular-weight immunoreactive band is detected in the VEGFR2 molecular weight region. VEGFR2 undergoes extensive glycosylation and maturation, resulting in receptor species migrating substantially above the approximately 152 kDa predicted polypeptide mass. The target-associated signal demonstrates detection of KDR phosphorylated at Tyr996 and provides western blot validation for the Phospho-VEGFR2 Antibody.



Phospho-KDR pY996 Antibody in Human Breast Carcinoma IHC. Immunohistochemistry staining of FFPE human breast carcinoma tissue with Phospho-KDR pY996 Antibody. Brown immunoreactivity is visible in malignant epithelial cells, with staining distributed through the cytoplasmic and membranous regions while nuclei remain comparatively unstained. The localized tumor-cell staining demonstrates tissue detection of VEGFR2 phosphorylated at Tyr996 and supports IHC use of the Phospho-VEGFR2 Antibody.

Description

Phospho-KDR pY996 Antibody / Phospho-VEGFR2 Antibody recognizes KDR/VEGFR2 when phosphorylated at tyrosine 996. KDR, also known as vascular endothelial growth factor receptor 2, VEGFR2 and CD309, is a receptor tyrosine kinase that serves as a major mediator of vascular endothelial growth factor signaling. Phosphorylation of intracellular tyrosine residues accompanies receptor activation and helps regulate downstream signaling events controlling vascular and endothelial cell biology.

VEGFR2 contains an extracellular ligand-binding region, a single transmembrane segment and an intracellular split tyrosine kinase domain. VEGF binding promotes receptor dimerization and kinase activation, resulting in phosphorylation of multiple intracellular tyrosine residues. These phosphorylation events create regulatory and protein-interaction sites that connect activated VEGFR2 with signaling networks controlling endothelial cell proliferation, migration, survival and vascular permeability.

Tyrosine 996 is located within the intracellular kinase region of VEGFR2. Phosphorylation-specific recognition of this site enables researchers to examine a phosphorylated population of the receptor rather than total KDR abundance. A Phospho-VEGFR2 Antibody can therefore complement antibodies against total VEGFR2 when investigating changes in receptor phosphorylation that occur without corresponding changes in overall protein expression.

VEGFR2 phosphorylation is relevant to studies of angiogenesis, endothelial signaling and vascular development. The VEGF-KDR signaling axis is also extensively investigated in cancer because increased VEGF signaling can support development of tumor-associated vasculature. Abnormal VEGFR2 activity is additionally relevant to pathological processes involving altered vascular growth or permeability, making phosphorylation-specific reagents useful for studying receptor signaling state.

NSJ Bioreagents offers this phospho-specific reagent for research into KDR activation and VEGF-dependent signal transduction. The Phospho-KDR pY996 Antibody terminology identifies both the receptor and targeted phosphorylation site, while Phospho-VEGFR2 Antibody reflects the widely recognized receptor designation.

A Phospho-KDR pY996 Antibody provides a phosphorylation-specific reagent for investigating KDR phosphorylation at Tyr996, while a Phospho-VEGFR2 Antibody supports research into VEGF receptor activation, angiogenesis and endothelial signaling.

For another antibody targeting the same receptor, see our VEGFR2 Antibody / KDR Polyclonal Antibody.

Application Notes

Titration of the Phospho-KDR pY996 Antibody / Phospho-VEGFR2 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This Phospho-KDR pY996 Antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pY996 of human KDR/FLK1.

Storage

Aliquot the Phospho-KDR pY996 Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Phospho-VEGFR2 antibody, VEGFR2 pY996 antibody, KDR pY996 antibody, Phospho-CD309 antibody, Phospho-VEGF Receptor 2 antibody

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