

Product datasheet for **TA301154**

VEGF Receptor 2 (KDR) Rabbit Monoclonal Antibody [Clone ID: EPRER16Y]

Product data:

Product Type:	Primary Antibodies
Clone Name:	EPRER16Y
Applications:	WB
Recommended Dilution:	WB: 1:1000 - 1:10000; IP: 1:20
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide corresponding to residues in extracellular domain of human KDR/VEGFR2 was used as an immunogen. It is predicted that this antibody does not cross react with other members of VEGF receptor family.
Formulation:	pH: 7.40Preservative: 0.01% Sodium azideConstituents: 50% Glycerol, 0.05% BSA
Purification:	Tissue culture supernatant
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	kinase insert domain receptor
Database Link:	NP_002244 Entrez Gene 3791 Human P35968



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Background:

The expression of VEGF and KDR correlates highly with the normal ocular vascularization in humans, but VEGF may also be necessary for nonvascular retinal developmental functions, especially for the coordination of neural retinal development and the preliminary steps of the establishment of the definitive stable retinal vasculature (1). KDR/flk-1 is one of two receptors for vascular endothelial growth factor, a potent angiogenic peptide. KDR/flk-1 is an early marker for endothelial cell progenitors, and its expression is restricted to endothelial cells in vivo (2). Therapeutic angiogenesis is likely to require the administration of factors that complement each other. Activation of the receptor tyrosine kinase KDR/Flk1 by vascular endothelial growth factor (VEGF) is crucial, but molecular interactions of other factors with VEGF and Flk1 have been studied to a limited extent. Activation of KDR/Flt1 by PGF resulted in intermolecular transphosphorylation of Flk1, thereby amplifying VEGF-driven angiogenesis through KDR/Flk1. Even though VEGF and PGF both bind KDR/Flt1, PGF uniquely stimulated the phosphorylation of specific KDR/Flt1 tyrosine residues and the expression of distinct downstream target genes (3).

Synonyms:

CD309; FLK1; VEGFR; VEGFR2

Note:

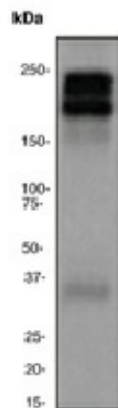
Is unsuitable for Flow Cyt, ICC or IHC-P.

Protein Families:

Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane

Protein Pathways:

Cytokine-cytokine receptor interaction, Endocytosis, Focal adhesion, VEGF signaling pathway

Product images:

Western blot - Anti-VEGF Receptor 2 antibody [EPRER16Y]; Anti-VEGF Receptor 2 antibody [EPRER16Y] at 1/500 dilution + Human placenta lysate at 10 ug.Secondary.HRP labelled goat anti-rabbit at 1/2000 dilution.Predicted band size : 151 kDa.Observed band size : 210, 230 kDa.