

Product datasheet for **AM26789PU-N**

VEGF Receptor 2 (KDR) (2nd Extracell. Dom.) Rat Monoclonal Antibody [Clone ID: BEP-5A1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	BEP-5A1
Applications:	ELISA, FC
Recommended Dilution:	Flow Cytometry: 1.2 µg/10 ⁶ cells. ELISA: 1/200-1/400. Cell-based ELISA: 1/200-1/400.
Reactivity:	Human, Porcine
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Complete extracellular domain of human VEGFR-2 which has been shown to be specific for the native target molecule and its counterpart in pigs using FACscan analyses on viable, transiently-transfected human BOSC23 cells (see Fig. 1). Selection: based on recognition of the complete native protein expressed on transfected mammalian cells.
Specificity:	This antibody detects VEGFR2 at the second extracellular immunoglobulin-like domain.
Formulation:	Phosphate buffered saline, pH 7.2 State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Protein G Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	kinase insert domain receptor
Database Link:	Entrez Gene 3791 Human P35968



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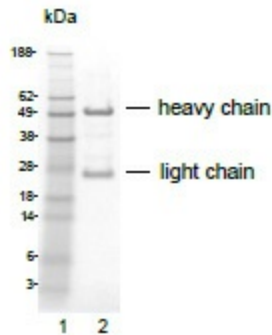
Background:

The vascular endothelial growth factor receptor-2 (VEGFR-2) plays an important role in the control of angiogenesis. This molecule is expressed on the surface of circulating endothelial stem cells as well as on adult vascular endothelial cells and other cell types (1). It is a 200-kDa type I transmembrane protein, consisting of a 19 amino acid leader peptide, a 744 amino acid extracellular domain made up of 7 immunoglobulin-like domains, a 24 amino acid transmembrane region and a 568 amino acid cytoplasmic domain. Interactions with VEGF ligands will stimulate angiogenesis, required in wound healing but also misused by tumours to promote their vascularization (2).

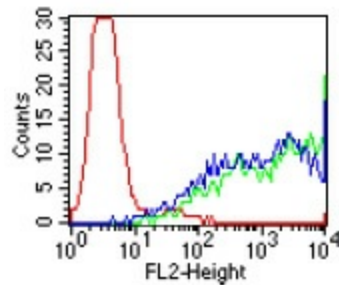
Synonyms:

VEGFR2, FLK1, KDR, VEGF Receptor 2

Product images:



SDS-PAGE analysis of purified BEP-5A1 monoclonal antibody. Lane 1: molecular weight marker, Lane 2: 2 ug of purified BEP-5A1 antibody. Proteins were separated by SDS-PAGE and stained with RAPID Stain™ Reagent 3. and stained with RAPID Stain™ Reagent 3.



: BOSC23 cells were transiently transfected with an expression vector encoding either human VEGFR2 (green curve), pig VEGFR2 (blue curve) or an irrelevant protein (control transfectant, red curve). Binding of BEP-5A1 was detected with a PE conjugated secondary antibody. A positive signal was obtained only with human and pig VEGFR2 transfected cells.