

## Product datasheet for **AM26786PU-N**

### **VEGF Receptor 2 (KDR) (3rd Extracell. Dom.) Rat Monoclonal Antibody [Clone ID: BEP-5D8]**

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	BEP-5D8
Applications:	ELISA, FC, WB
Recommended Dilution:	<b>Flow Cytometry:</b> 1.2 µg/10 <sup>6</sup> cells. <b>ELISA:</b> 1/200-1/400. <b>Cell based ELISA:</b> 1/200-1/400.
Reactivity:	Human, Porcine
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	genetic immunisation with cDNA encoding Human VEGFR2. <b>Selection:</b> based on recognition of the complete native protein expressed on transfected mammalian cells.
Specificity:	This antibody detects VEGFR2 (epitope on the third 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:	<a href="#">Entrez Gene 3791 Human P35968</a>



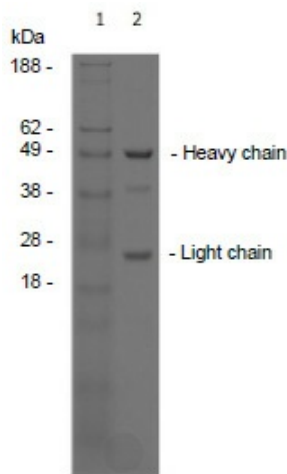
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**Background:**

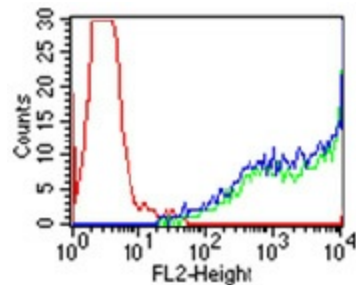
The vascular endothelial growth factor receptor-2 (VEGFR-2) plays an important role in the control of angiogenesis. This molecule is expressed on the surface of circulating endothelial stem cells as well as on adult vascular endothelial cells and other cell types (1). It is a 200-kDa type I transmembrane 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). The current monoclonal antibody was developed by genetic immunization against the complete extracellular domain of human VEGFR-2 and 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). It binds to an epitope on the third extracellular immunoglobulin-like domain.

**Synonyms:**

VEGFR2, FLK1, KDR, VEGF Receptor 2

**Product images:**

SDS-PAGE analysis of purified BEP-5D8 monoclonal antibody. Lane 1: molecular weight marker, Lane 2: 2 ug of purified BEP-5D8 antibody. Proteins were separated by SDS-PAGE and stained with RAPID Stain™ Reagent 3.



AM26786PU-N: 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-5D8 was detected with a PE-conjugated secondary antibody. A positive signal was obtained only with human and pig VEGFR2 transfected cells.