

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human EG-VEGF/PK1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant rat EG-VEGF is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 188601
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human EG-VEGF/PK1 Ala20-Phe105 Accession # P58294
<b>Conjugate</b>	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

Endocrine gland-derived vascular endothelial growth factor (EG-VEGF), also called prokineticin 1 (PK1), is a member of the prokineticin family of secreted proteins that share a common structural motif containing ten conserved cysteine residues that form five pairs of disulfide bonds (1, 2). Members of this family include the mammalian EG-VEGF/PK1 and PK2, as well as the venom protein A (VPRA) from the venom of black mamba snake and the frog *Bombina variegata*, Bv8 (1). Human EG-VEGF precursor is a 105 amino acid (aa) residue protein with a 19 aa signal peptide that is cleaved to yield a 86 aa mature protein (1, 2). EG-VEGF is expressed in multiple tissues including the gastrointestinal (GI) tract and steroidogenic glands (testis, ovary, placenta and adrenal glands). EG-VEGF has been shown to potently stimulate the contraction of GI smooth muscle. In addition, EG-VEGF is a tissue-specific angiogenic factor that exhibits biological activities similar to that of VEGF on select cells. It induces the proliferation, migration, and fenestration in cultured endocrine gland-derived capillary endothelial cells. EG-VEGF binds to and activates two closely related G protein-coupled receptors, EG-VEGF/PK1-R1 and EG-VEGF/PK2-R2 (3, 4). Activation of the receptors leads to stimulation of phosphoinositide turnover and activation of p44/p42 MAP kinase signaling pathways.

## PRODUCT SPECIFIC NOTICES

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