

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human EG-VEGF/PK1 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 188608
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human EG-VEGF/PK1 Ala20-Phe105 Accession # P58294
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	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.

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	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.

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