Human PIGF Alexa Fluor® 700-conjugated Antibody

Monoclonal Mouse IgG_{2A} Clone # 146213

Catalog Number: FAB297N

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human VEGF/PIGF heterodimer in direct ELISAs and Western blots. This antibody does not detect either subunit alone. In direct ELISAs, this antibody does not cross-react with recombinant human (rh) $VEGF_{121}$, $rhVEGF_{165}$
Source	Monoclonal Mouse IgG_{2A} Clone # 146213
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human VEGF/PIGF heterodimer Ala27-Arg191 (VEGF) & Ala21-Arg149 (PIGF) Accession # AAM03108 (VEGF) & AAD30179 (PIGF)
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.*

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

The disulfide-linked homodimeric proteins vascular endothelial growth factor (VEGF) and placenta growth factor (PIGF) are both members of the VEGF family of growth factors. VEGF and PIGF proteins share primary structural as well as limited amino acid sequence homology with the A and B chains of PDGF. All eight cysteine residues involved in intra- and inter-chain disulfides are conserved among these growth factors. In their PDGF-like regions, VEGF and PIGF also share approximately 53% amino acid sequence similarity. *E. coli*-expressed monomers of PIGF and VEGF can be refolded in vitro to form PIGF/VEGF heterodimers. The purified recombinant VEGF/PIGF heterodimers and VEGF homodimers have potent mitogenic effects on endothelial cells. However, VEGF/PIGF heterodimers display approximately 50-fold less mitogenic activity than VEGF homodimers. In contrast, PIGF homodimers have little or no mitogenic effect on endothelial cells. The presence of natural VEGF/PIGF heterodimers in the conditioned media of a number of human tumor cell lines has been demonstrated using a VEGF/PIGF heterodimer specific ELISA.

PRODUCT SPECIFIC NOTICES

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