Mouse PlGF-2 Antibody

Monoclonal Rat IgG_{2A} Clone # 62503

Catalog Number: MAB4651

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse PlGF-2 in ELISAs. In ELISAs, no cross-reactivity or interference was observed with recombinant mouse (rm) VEGF R1, rmVEGF R2, or rmVEGF R3.
Source	Monoclonal Rat IgG_{2A} Clone # 62503
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant mouse PlGF-2 Ala24-Pro158 Accession # P49764
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

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.*

Mouse PlGF-2 Sandwich Immunoassay		**Reagent**
ELISA Capture	2-8 µg/mL	Mouse PlGF-2 Antibody (Catalog # MAB4651)
ELISA Detection	0.1-0.4 µg/mL	Mouse PlGF-2 Biotinylated Antibody (Catalog # BAF465)
Standard		Recombinant Mouse PlGF-2 (Catalog # 465-PL)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Placenta growth factor (PlGF) is a member of the vascular endothelial growth factor (VEGF) family of growth factors. PlGF and VEGF 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. As a result of alternative splicing, three PlGF RNAs encoding monomeric human PlGF-1, PlGF-2 and PlGF-3 isoform precursors containing 149, 179 and 219 amino acid residues, respectively, have been described. In normal mouse tissues, only one mouse PlGF mRNA encoding the equivalent of human PlGF-2 has been identified. Mouse PlGF-2 encodes a 158 amino acid residue precursor protein. Recombinant mouse PlGF preparations purified from the transfected Sf 21 insect cell conditioned medium contain a mixture of two distinct mature PlGF monomers that are derived from the removal of either a 23 or a 26 residue signal peptide from the amino-terminus of the precursor protein. Mouse PlGF-2 shares 65% amino acid identity with human PlGF-2. The gene for PlGF has been mapped to mouse chromosome 12 and human chromosome 14. PlGF binds with high-affinity to Flt-1, but not to Flk-1/KDR.

References:

1. DiPalma, T. *et al.* (1996) Mamm. Genome **7**:6.
2. Cao, Y. *et al.* (1997) Biochem. Biophys. Res. Commun. **235**:493.
3. Ferrara, N. *et al.* (1997) Endocrin. Rev. **18**:4.

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