

Mouse anti-Human PIGF Monoclonal Antibody | anti-PIGF antibody

Mouse Anti-Human PIGF

CATALOG # AAA79114	HOST Mouse	REACTIVITY Human	APPLICATIONS Immunoprecipitation, Western Blot, ELISA
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PRODUCT SYNONYMS

PIGF; Monoclonal Antibody; Mouse Anti-Human PIGF; Anti-human PIGF (#178/G10); Placenta growth factor; anti-PIGF antibody

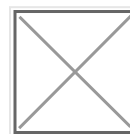
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	IgG1; 178/G10
Purity/Purification	Protein G purified
Form/Format	Lyophilized
Sequence Length	149
Applicable Applications for anti-PIGF antibody	IP (Immunoprecipitation), WB (Western Blot), ELISA
Immunogen	Recombinant human PIGF-2 (RT #300-019)
Preparation	Monoclonal antibodies were produced with the help of BALB/c mice using recombinant human PIGF-2 [Leu19 - Arg170] as the immunizing antigen.
Buffer	PBS
Preparation and Storage	The lyophilized antibody, thought stable at room temperature, is best stored desiccated below 0 degree C. Reconstituted anti-PIGF-2 is stable at 4 degree C for > 6 month or can be stored in working aliquots at -20 degree C for more than six months.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-PIGF antibody	Placenta growth factor (PIGF) is a member of the PDGF/VEGF family of growth factors that share a conserved pattern of eight cysteines. Alternate splicing results in at least three human mature PIGF forms containing 131 (PIGF1), 152 (PIGF2), and 203 (PIGF3) amino acids (aa) respectively. Only PIGF2 contains a highly basic heparinbinding 21 aa insert at the C-terminus. In the mouse, only one P IGF that is the equivalent of human PIGF2 has been identified. Human PIGF1 shares 56%, 55%, 74% and 95% aa identity with the appropriate isoform of mouse, rat, canine and equine PIGF. PIGF is mainly found as variably glycosylated, secreted, 55 - 60 kDa disulfide linked homodimers. Mammalian cells expressing PIGF include villous trophoblasts, decidual cells, erythroblasts, keratinocytes and some endothelial cells. Circulating PIGF increases during pregnancy, reaching a peak in mid-gestation ³ ; this increase is attenuated in preeclampsia. However, deletion of PIGF in the mouse does not affect development or reproduction. Postnatally, mice lacking PIGF show impaired angiogenesis in response to ischemia. PIGF binds and signals through VEGF R1/Flt1, but not VEGF R2/Flk-1/KDR, while VEGF binds both but signals only through the angiogenic receptor, VEGF R2. PIGF and VEGF therefore compete for binding to VEGF R1, allowing high PIGF to discourage VEGF/VEGF R1 binding and promote VEGF/VEGF R2mediated angiogenesis. However, PIGF (especially PIGF1) and some forms of VEGF can form dimers that decrease the angiogenic effect of VEGF on VEGF R2. PIGF2, but not PLGF-1, shows heparindependent binding of neuropilin (Npn)-1 and Npn2. PIGF induces monocyte activation, migration, and production of inflammatory cytokines and VEGF. These activities facilitate wound and bone fracture healing, but also contribute to inflammation in active sickle cell disease and atherosclerosis.
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 4. Kim KJ et al, Exp Mol Med 44:10-9, 2012 5. De Falco S, Exp Mol Med 44:1-9, 2012

NCBI AND UNIPROT INFORMATION

NCBI GI #	333033785
NCBI GeneID	5228
NCBI Accession #	NP_001193941.1
NCBI GenBank Nucleotide #	NM_001207012.1
UniProt Accession #	P49763; Q07101; Q9BV78; Q9Y6S8
Molecular Weight	24,789 Da
NCBI Official Full Name	placenta growth factor isoform 2
NCBI Official Synonym Full Names	placental growth factor
NCBI Official Symbol	PGF
NCBI Official Synonym Symbols	PGFL; PLGF; PIGF-2; D12S1900; SHGC-10760
NCBI Protein Information	placenta growth factor; placental growth factor, vascular endothelial growth factor-related protein
UniProt Protein Name	Placenta growth factor
UniProt Gene Name	PGF
UniProt Synonym Gene Names	PGFL; PLGF; PIGF
UniProt Entry Name	PLGF_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/plgf-antibody-clone-igg1-178-g10-immunoprecipitation-western-blot-elisa/79114>