

Mouse PIGF-2 Monoclonal Antibody | anti-PIGF-2 antibody

Mouse Anti-Human PIGF-2

CATALOG # AAA79330	HOST Mouse	REACTIVITY No cross reactivity with mouse and rat PIGF.	APPLICATIONS Immunofluorescence, Western Blot, ELISA
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PRODUCT SYNONYMS

PIGF-2; Monoclonal Antibody; Mouse Anti-Human PIGF-2; PIGF; placental growth factor; anti-PIGF-2 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	No cross reactivity with mouse and rat PIGF.
Clonality	Monoclonal
Isotype	IgG ₁
Clone Number	3B3/A9/A6/D1
Purity/Purification	Protein G purified
Form/Format	Sterile filtered antibody solution was lyophilized from PBS; does not contain stabilizers or preservatives.
Applicable Applications for anti-PIGF-2 antibody	IF (Immunofluorescence), WB (Western Blot), ELISA
Reconstitution	Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.
Preparation	Monoclonal antibodies were produced with the help of BALB/c mice using recombinant human PIGF-2 [Leu19 - Arg170] as the immunizing antigen.
Immunogen	Recombinant human PIGF-2
Preparation and Storage	Product Form Temperature Storage Time Lyophilized -20°C to -80°C Long Term Lyophilized 4°C 3 Months Lyophilized Room Temperature 1 Month Reconstituted 2°C to 8°C 2 Weeks Extended Storage -20°C to -80°C 6 Months Extended Storage After initial reconstitution, the addition of a carrier protein or 50% glycerol is recommended for extended storage. Prepare and store working aliquots at -20°C to -80°C.

IMAGES



IF (Immunofluorescence)

IF staining of human PIGF1 and PIGF2 in Sf9 cells expressing either PIGF1 or PIGF2. Upper lane: mouse anti-human PIGF2 #D1 [Cat# AAA79330] recognizing only PIGF2 and mouse anti-human PIGF #178/G10 [Cat# recognizing both isoforms of PIGF].



Application Data

Human sFlt1 (Cat# was coated with 1ug/ml to a 96-well plate. Recombinant human PIGF2 was pre-incubated with a 10x and 50x excess of anti-human PIGF2 (Cat# AAA79330, recognizing only PIGF2) and anti-human PIGF (Cat# recognizing both isoforms) for 90min. Then PIGF2 alone and the approaches with the antibodies were added. Pre- incubation of the PIGF2-specific antibody #A6D1 with PIGF2 did not block the binding of PIGF2 to its receptor sFlt1. In contrast, pre-incubation of PIGF2 with Direct ELISA with recombinant human PIGF1 and PIGF2 derived from insect cells. Both proteins were coated to a 96-well plate [0.2ug/ml] and anti-human PIGF #331/H12 [Cat# recognizing both isoforms and the anti-human PIGF2 #D1 [Cat# AAA79330] recognizing specifically PIGF2 were added with increasing concentrations. Detection was carried out with an anti-mouse Biotin- conjugated antibody (Dianova



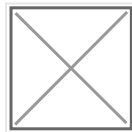
SDS-PAGE

Purified recombinant human PIGF2 (100 ng/lane) derived from insect cells was loaded in 12.5% SDS-PAGE under reducing conditions. As primary antibody mouse anti-human PIGF2 #D1 was used in a concentration of 1ug/ml (A), 0.5ug/ml (B), 0.1ug/ml (C) and 0.05ug/ml (D). The detection was carried out with a secondary, AP-conjugated anti-mouse Fc antibody. NOTE: There is still a signal visible for PIGF2 at an antibody concentration of 50ng/ml.



SDS-PAGE

Purified recombinant human PIGF2 (500 -10 ng/lane), PIGF1 (1000 ng/lane), and mouse and rat PIGF (500ng/lane) all derived from insect cells were loaded in 12.5% SDS-PAGE under reducing conditions. As primary antibody mouse anti-human PIGF2 #D1 was used in a concentration of 2ug/ml. The detection was carried out with a secondary, AP-conjugated anti-mouse Fc antibody. There is no cross reaction with human PIGF1, mouse and rat PIGF



WB (Western Blot)

Western analysis with human PIGF1 and PIGF2. Purified recombinant human PIGF1 (red: 500ng, non-red: 1000ng) and PIGF2 (red: 250ng, non-red: 500ng) were loaded in 15% SDS-PAGE under reducing and non-reducing conditions. As primary antibody mouse anti-human PIGF2 #D1 was used in a concentration of 0.5ug/ml. The detection was carried out with a secondary, AP-conjugated anti-mouse Fc antibody (Dianova, 1:1000). The anti-human PIGF-2 #D1 recognizes solely the PIGF2 isoform.

ADDITIONAL INFORMATION

Related Product Information for anti-PIGF-2 antibody

Human Placenta Growth Factor-2 (PIGF-2), a 22 kDa protein consisting of 152 amino acid residues is produced as a homodimer. PIGF is a polypeptide growth factor and a member of the platelet-derived growth factor family but more related to vascular endothelial growth factor (VEGF). PIGF acts only as a weak mitogen for those cell types possessing receptors for binding (e.g. vascular endothelial cells). At least one high-affinity receptor for PIGF (FLT-1 or VEGF-R1) has been demonstrated in different primary cell types (e.g. human umbilical vein endothelial cells and monocytes). In addition to its action as a weak mitogen it is also a chemoattractant for monocytes and endothelial cells. Three different proteins are generated by differential splicing of the human PIGF gene: PIGF-1 (131aa native chain), PIGF-2 (152aa) and PIGF-3 (203aa). All 3 mitogens are secretable proteins, but PIGF-2 can bind to heparin with high affinity. PIGF is apparently a homodimer, but preparations of PIGF show some heterogeneity on SDS gels depending of the varying degrees of glycosylation. All dimeric forms possess similar biological activities. Heterodimers between VEGF and PIGF are mitogenic for endothelial cells and have strong angiogenic activity in vivo (e.g. in the CAM assay or in the cornea pocket assay). Different cells and tissues (e.g. placenta) express PIGF-1 and PIGF-2 at different rates. A much related protein of PIGF is VEGF with about 53% homology and VEGF-B with similar biological activities.

NCBI AND UNIPROT INFORMATION

NCBI Accession #	NP_001193941.1
NCBI GenBank Nucleotide #	NM_001207012.1
UniProt Accession #	P49763
Molecular Weight	~50 kDa HC and ~25 kDa LC

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-2-antibody-clone-3b3-a9-a6-d1-immunofluorescence-western-blot-elisa/79330>