

#### DESCRIPTION

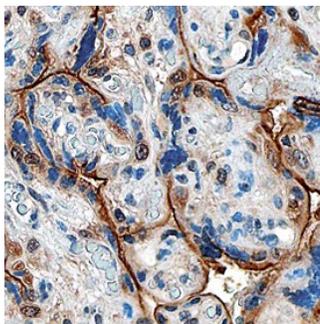
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human PIGF in direct ELISAs. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse PIGF-2 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human PIGF Leu19-Arg170 Accession # NP_002623
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

#### DATA

<b>Immunohistochemistry</b>
 <p><b>PIGF in Human Placenta.</b> PIGF was detected in formalin fixed paraffin-embedded sections of human placenta using Sheep Anti-Human PIGF Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6837) at 10 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to syncytiotrophoblasts. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>

#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

Placenta Growth Factor (PIGF) is a member of the Vascular Endothelial Growth Factor (VEGF) family of growth factors. PIGF 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. In their PDGF-like regions, VEGF and PIGF also share approximately 53% amino acid sequence similarity. The gene for PIGF has been mapped to chromosome 14. As a result of alternative splicing, at least two PIGF mRNAs encoding monomeric PIGF precursors containing 149 and 170 amino acid residues have been described. The expression of PIGF is not widespread, but has been detected in human umbilical vein endothelial cells, placenta, choriocarcinoma cell lines, and in renal cell carcinoma associated with angiogenesis. The PIGF proteins bind with high-affinity to Flt-1, but not to Flk-1/KDR.