

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human PIGF but not VEGF in direct ELISAs and Western blots. This antibody will also recognize the heterodimer of VEGF and PIGF.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Protein A or G purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PIGF (R&D Systems, Catalog # 264-PG) Ala21-Arg149 Accession # CAA38698
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

## 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>Western Blot</b>	1 µg/mL	Recombinant Human PIGF (Catalog # 264-PG)

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 1 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.
<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.