

## DESCRIPTION

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| <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<br>Leu19-Arg170<br>Accession # NP_002623                          |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                      |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                                                         |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                                                                      |

## 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.

**Immunohistochemistry** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## 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.

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