**DESCRIPTION**

Species Reactivity  | Human  
-------------------|-----------------  
Specificity        | Detects human PLGF in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) CTGF, rhLDGF, rhPDGF, rhVEGF-C, rhVEGF-D, rhVEGF-B 186, rhVEGF 206, or recombinant mouse PIGF-2 is observed.  
Source             | Monoclonal Rat IgG2A Clone # 358905  
Purification       | Protein A or G purified from hybridoma culture supernatant  
Immunogen          | E. coli-derived recombinant human PLGF Ala21-Ala149 (predicted)  
Accession #        | P49763  
Formulation        | 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.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunohistochemistry</td>
<td>8-25 μg/mL</td>
</tr>
</tbody>
</table>

**DATA**

**Immunohistochemistry**

PIGF in Human Placenta. PIGF was detected in immersion fixed paraffin-embedded sections of human placenta using Human PIGF Monoclonal Antibody (Catalog # MAB2642) at 25 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Rat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS017) and counterstained with hematoxylin (blue). Specific staining was localized to syncytiotrophoblast cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

**PREPARATION AND STORAGE**

Reconstitution  | Sterile PBS to a final concentration of 0.5 mg/mL.  
Shipping        | 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.  
Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
• 12 months from date of receipt, -20 to -70 °C as supplied.  
• 1 month, 2 to 8 °C under sterile conditions after reconstitution.  
• 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

Placenta growth factor (PIGF) is a member of the vascular endothelial growth factor (VEGF) family of growth factors. 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 VEGF R1/Flt-1 but not to VEGF R2/Flk-1.