

## Recombinant Human PlGF

Cat No:HR2R1888

For research use only

### Overview

Quantity	25 ?g
Gene Symbol	PGF
Gene ID	5228
Accession	P49763
Alternative Name	PGF, PGLF
Species	Human
Source	E. coli
Description	<p>Human PlGF, or Placental Growth Factor, is part of the PDGF/VEGF family and contains the 8 cysteine residues conserved in the family. It can be alternately spliced into three different mature forms. PlGF is typically found as a disulfide linked dimer which is highly glycosylated. It is a key molecule involved in vasculogenesis and angiogenesis, especially during embryogenesis. It also induces the activation of monocytes, as well as their migration and production of inflammatory cytokines. It is primarily expressed by the placental trophoblast during pregnancy, but is also expressed in villous trophoblasts, decidual cells, erythroblasts, keratinocytes, and somewhat in endothelial cells. PlGF signals by binding VEGF R1, and competes with VEGF for binding. Recombinant PlGF is a 15.0 kDa protein.</p>
Functions	The ED50 was found to be &lt;math>0.2\text{ng/ml}</math> using dose dependent proliferation of trophoblast cells.
Formulation	Lyophilized from a 0.2 ?m filtered solution in Citrate, phosphate and NaCl (pH 4.0)
Solubility	A quick spin of the vial followed by reconstitution in PBS to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	15
Purity	>95% as determined by SDS-PAGE
Concentration	<math><1.0\text{ EU/?g}</math> of recombinant protein as determined by the LAL method
Shipping Condition	Ambient Temperature
Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at $-70^{\circ}\text{C}$ . Upon reconstitution, this cytokine can be stored in working aliquots at $2^{\circ} - 8^{\circ}\text{C}$ for one month, or at $-20^{\circ}\text{C}$ for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.