

Recombinant Human PIGF

Cat. No. PIGF-456H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Placental growth Factor was expressed in modified <i>human 293 cells</i> .
Species	Human
Source	HEK293
Description	PIGF (Placental growth Factor) was isolated initially as a cDNA from a human placenta cDNA library. PIGF is expressed also in human umbilical vein endothelial cells colon and mammary carcinomas. 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. The biologically active form of this protein is a disulfide-linked dimer. The N-glycosylated dimeric protein is secreted and stimulates the proliferation of endothelial cell lines and supports angiogenesis.
Theoretical Sequence	MPVMRLFPCFLQLLAGLALPAVPPQQWALSAGNGSSEVEVVPFQEVWG RSYCRAL ERLVDVVSEYPSEVEHMFSPSCVSLLRCTGCCGDENLHCVPV ETAN VT MQLL KIR SG DRPS YVELTFSQHVRCRPLREKMKPERCGD AVPRR.
Molecular Mass	PIGF migrates as two broad bands between 17 and 30 kDa on SDS-PAGE due to post-translation modifications, in particular glycosylation. This compares with the unmodified PLGF that has a predicted molecular mass of 16.7kDa.
PI	PIGF separates into a number of glycoforms with varying pI values on 2D PAGE due

 Tel: 1-631-559-9269 1-516-512-3133

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	to post-translational modifications, in particular glycosylation. This compares with the unmodified PLGF that has a predicted pI of 6.3.
% Carbohydrate	purified PIGF consists of 0-38% carbohydrate by weight.
Glycosylation	PIGF has N-linked and O-linked oligosaccharides.
Purity	>95%, as determined by SDS-PAGE and visualized by Coomassie Brilliant Blue.
Formulation	When reconstituted in 0.5 ml sterile phosphate-buffered saline, the solution will contain 1% human serum albumin (HSA) and 10% trehalose.
Reconstitution	It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial.
Storage	Lyophilized products should be stored at 2 to 8°C. Following reconstitution short-term storage at 4°C is recommended, with longer-term storage in aliquots at -18 to -20°C.

GENE INFORMATION

Gene Name	PIGF phosphatidylinositol glycan anchor biosynthesis, class F [Homo sapiens]
Synonyms	phosphatidylinositol glycan anchor biosynthesis, class F; MGC32646; MGC33136; PIGF; phosphatidylinositol glycan, class F; PIG-F; GPI11 homolog; OTTHUMP00000159031
Gene ID	5281
mRNA Refseq	NM_002643
Protein Refseq	NP_002634

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MIM	600153
UniProt ID	Q07326
Chromosome Location	2p21-p16
Pathway	Glycosylphosphatidylinositol(GPI)-anchor biosynthesis; Metabolic pathways; Metabolism of proteins
Function	ethanolaminephosphotransferase activity; protein binding

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