

RP02896

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Recombinant Human Placenta growth factor/PLGF-131 Protein

Catalog No.: RP02896

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	5228	P49763-2

Tags
C-hFc

Synonyms

D12S1900; PGFL; PIGF; PLGF; PIGF-2;
SHGC-10760;PGF;PGFL;PIGF;PLGF;PIGF-2
;SHGC-10760

Product Information

Source	Purification
HEK293 cells	

Endotoxin
< 0.1 EU/μg

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

Background

Placenta growth factor (PGF) is a member of the PDGF/VEGF family of growth factors that share a conserved pattern of eight cysteines (1, 2). Alternative splicing results in at least three human mature PIGF forms containing 131 (PIGF-1), 152 (PIGF-2), and 203 (PIGF-3) amino acids (aa) respectively (1, 2). Only PIGF-2 contains a highly basic heparin-binding 21 aa insert at the C-terminus (1). Human PIGF-1 shares 56%, 55%, 74% and 95% aa identity with the comparable isoform of mouse, rat, canine, and equine PIGF, respectively. PIGF is mainly found as variably glycosylated, secreted, 55-60 kDa disulfide linked homodimers (3). Mammalian cells expressing PIGF include villous trophoblasts, decidual cells, erythroblasts, keratinocytes, and some endothelial cells (1, 4-6). Circulating PIGF increases during pregnancy, reaching a peak in mid-gestation; this increase is attenuated in preeclampsia (7). However, deletion of PIGF in the mouse does not affect development or reproduction. Postnatally, mice lacking PIGF show impaired angiogenesis in response to ischemia (8).

Basic Information

Description

Recombinant human PIG-F Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Leu19-Arg149) fused with a hFc tag at the C-terminus.

Bio-Activity

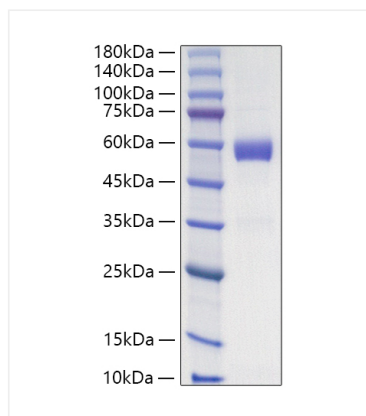
Storage

Store the lyophilized protein at -20°C to -80°C for long term. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

www.abclonal.com

Validation Data



Recombinant Human Placenta growth factor/PLGF-131 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 45-60 kDa.