

ChemWhot Recombinant Human Placenta Growth Factor-2 (rHuPlGF-2)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:

105-44

Source:

Escherichia coli.

Molecular Weight:

Approximately 34.6 kDa, a disulfide-linked homodimer consisting of two 152 amino acid polypeptide

chains.

Quantity:

 $5 \mu g / 25 \mu g / 1000 \mu g$

AA Sequence:

LPAVPPQQWA LSAGNGSSEV EVVPFQEVWG RSYCRALERL VDVVSEYPSE VEHMFSPSCV SLLRCTGCCG DENLHCVPVE TANVTMQLLK IRSGDRPSYV ELTFSOHVRC ECRPLREKMK PERRRPKGRG KRRREKORPT DCHLCGDAVP RR

Purity:

> 97 % by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. The biologically active as determined by its

ability to chemoattract human monocytes using a concentration range of 5.0-50 ng/ml.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, with 0.02 % Tween-20.

Endotoxin:

Less than 0.1 EU/µg of rHuPlGF-2 as determined by LAL method.

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature

recommended below.

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.

3 months, -20 to -70 °C under sterile conditions after reconstitution.

Usage:

ChemWhat Limited in UK offers this branded product for research, development or further

evaluation purposes. NOT FOR HUMAN USE.

Human Placenta Growth Factor-2

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. As a result of alternative splicing, three PIGF RNAs encoding monomeric human PIGF-1, PIGF-2 and PIGF-3 isoform precursors containing 149, 179 and 219 amino acid residues, respectively, have been described. Human PIGF-2 shares 65 % amino acid identity with murine PIGF-2.

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