



PLGF (Placental Growth Factor Vascular Endothelial Growth Factor-related Protein, Placental Growth Factor, PGF, PLGF-1, PLGF-2)

Catalog number

P4273-01B

Supplier

United States Biological

Placental growth factor (PLGF) is a dimeric glycoprotein and member of the vascular endothelial growth factor (VEGF) family, involved in angiogenesis, and the stimulation of endothelial cell proliferation and migration. The three isoforms PLGF1, PLGF2 and PLGF3 are present in most placental tissues and act through binding to the VEGFR-1/FLT1 receptor. The involvement of PLGF in angiogenesis has made PLGF a focus area in the study of inflammatory diseases such as rheumatoid arthritis and psoriasis, and PLGF is used as a biochemical marker in cardiovascular disease, and also detected at reduced levels during preeclampsia.

Applications

Suitable for use in ELISA and Western Blot. Other applications not tested.

Recommended Dilutions

ELISA: 2ug/ml using 100ul/well

Western Blot: 1-2ug/ml. The detection limit for recombinant human PLGF is ~20ng/lane and ~300ng/lane under non-reducing and reducing conditions, respectively. Homodimeric recombinant PLGF migrates as an ~29kD protein.

Optimal dilutions to be determined by the researcher.

Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months after receipt. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

Immunogen

Recombinant corresponding to full length human PLGF, expressed in E. coli. Cellular Localization: The three isoforms are secreted but PLGF2 appears to remain cell attached unless released by heparin.

Formulation

Supplied as a liquid in PBS, 5% trehalose.

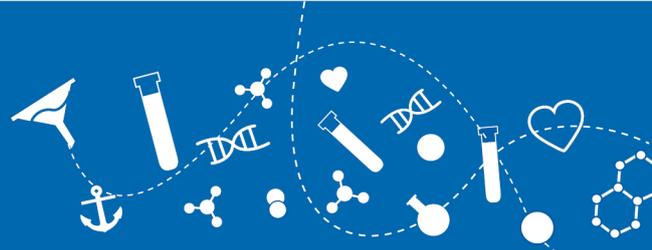
Purity

Purified by Protein G affinity chromatography.

Specificity

Recognizes human PLGF. Does not crossreact with recombinant human VEGF, PDGFAA, PDGFAB or PDGFBB in Western Blot.

Product Type



Mab

Source

human

Isotype

IgG1

Grade

Affinity Purified

Applications

E WB

Crossreactivity

Hu

Storage

-20°C

Reference

1. Maglione, D., et al., Isolation of a human placenta cDNA coding for a protein related to the vascular permeability factor. Proc. Natl. Acad. Sci. USA 88: 9267-9271 (1991). 2. Kaipainen, A., et al., The related FLT4, FLT1, KDR receptor tyrosine kinases show distinct expression patterns in human fetal endothelial cells. J. Exp. Med. 178: 2077-2088 (1993). 3. Maglione, D., et al., Two alternative mRNAs coding for the angiogenic factor, placenta growth factor (PlGF), are transcribed from a single gene of chromosome 14. Oncogene 8: 925-931 (1993). 4. DiPalma, T., et al., The placenta growth factor gene of the mouse. Mamm. Genome 7: 6-12 (1996).