Mouse PIGF / PLGF Protein (Fc Tag)

Catalog Number: **50125-M02H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

AI854365, PIGF, Plgf

Protein Construction:

A DNA sequence encoding the mouse PGF (P49764) (Met 1-Pro 158) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 76 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Val 19

Molecular Mass:

The recombinant mouse PGF/Fc is a disulfide-linked homodimer. The reduced monomer comprises 381 amino acids and has a calculated molecular mass of 42.9 kDa. As a result of glycosylation, the apparent molecular mass of the monomer is approximately 52 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

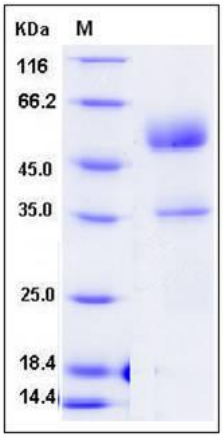
Usage Guide

Storage:

Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Placental growth factor (PlGF, PLGF, PGF), and its receptor VEGFR-1 (Flt-1) constitute potential candidates for therapeutic modulation of angiogenesis and inflammation. The main source of PGF during pregnancy is the placental trophoblast. PGF is also expressed in many other tissues, including the villous trophoblast. PlGF/PLGF is an angiogenic factor that belongs to the vascular endothelial growth factor (VEGF) family. Besides inducing its own signaling in endothelial cells, PlGF exerts its angiogenic action by synergising with VEGF. In the skin, PlGF expression is upregulated during wound healing and PlGF-deficient mice show delayed wound closure, indicating that this factor promotes angiogenesis during skin repair. Moreover, PlGF expression by melanoma cells has been linked to tumor growth.

References

1. Khalil A. et al., 2008, PLoS ONE. 3 (7): e2766.
2. Luttun A. 2002, Ann N Y Acad Sci. 979: 80-93.
3. Chaballe L, et al., 2011, Acta Neurol Belg. 111 (1): 10-7.
4. Odorisio T, et al., 2006, J Dermatol Sci. 41 (1): 11-9.