

Human EG-VEGF / prokineticin-1 Protein (His Tag)

Catalog Number: 10183-H08B



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

EGVEGF; PK1; PRK1

Protein Construction:

A DNA sequence encoding the human EG-VEGF (Met 1-Phe105) (P58294) was expressed, with a C-terminal polyhistidine tag.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 89 % 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 °C

Predicted N terminal: Ala 20

Molecular Mass:

The secreted recombinant human EG-VEGF consists of 96 amino acids and predicts a molecular mass of 11 KDa. The apparent molecular mass of the protein is approximately 15 Kda in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 0.02% Tween-80, 10% gly, 1mM DTT

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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:

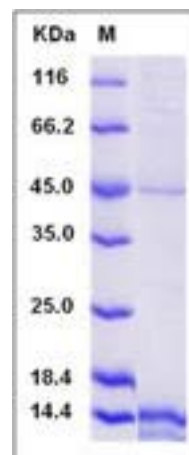
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

EG-VEGF, also known as prokineticin-1, is a member of the AVIT (prokineticin) family. Prokineticins are secreted proteins that can promote angiogenesis and induce strong gastrointestinal smooth muscle contraction. EG-VEGF can be detected in the steroidogenic glands, ovary, testis, adrenal and placenta. EG-VEGF has little or no effect on a variety of other endothelial and non-endothelial cell types. It induces proliferation, migration and fenestration (the formation of membrane discontinuities) in capillary endothelial cells derived from endocrine glands. It directly influences neuroblastoma progression by promoting the proliferation and migration of neuroblastoma cells. EG-VEGF may play a role in placentation. It may also function in normal and pathological testis angiogenesis. It positively regulates PTGS2 expression and prostaglandin synthesis.

References

- 1.Masuda Y, *et al.* (2002) Isolation and identification of EG-VEGF/prokineticins as cognate ligands for two orphan G-protein-coupled receptors. *Biochem. Biophys. Res. Commun.* 293 (1): 396-402.
- 2.Pasquali D. *et al.* (2006) The endocrine-gland-derived vascular endothelial growth factor (EG-VEGF)/prokineticin 1 and 2 and receptor expression in human prostate: Up-regulation of EG-VEGF/prokineticin 1 with malignancy. *Endocrinology.* 147 (9): 4245-51.
- 3.Ngan ES, *et al.* (2008) Prokineticin-1 (Prok-1) works coordinately with glial cell line-derived neurotrophic factor (GDNF) to mediate proliferation and differentiation of enteric neural crest cells. *Biochim Biophys Acta.* 1783 (3): 467-78.

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