PRODUCT INFORMATION

Expression system E.coli

Domain 16-155aa

UniProt No. P61148

NCBI Accession No. NP_034327

Alternative Names

Fibroblast growth factor 1 (acidic), Dffrx, Fam, Fgf-1, Fgfa, Acidic fibroblast growth factor, aFGF, Heparin-binding growth factor 1, HBGF-1

PRODUCT SPECIFICATION

Molecular Weight

18 kDa (161aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

Concentration 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 30% glycerol, 0.1M NaCl

Purity > 90% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Fibroblast growth factor 1, also known as FGF1, belongs to the fibroblast growth factor family. It is a potent mitogenic agent. FGF1 has been detected in large amounts in the brain. Other cells known to express FGF1 include hepatocytes, vascular smooth muscle cells, CNS neurons, skeletal muscle cells, fibroblasts,



keratinocytes, endothelial cells, intestinal columnar epithelium cells and pituitary basophils and acidophils. The growth factor acts through activation of specific cell-surface receptors leading to intracellular tyrosine phosphorylation cascade. Recombinant mouse FGF1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MFNLPLGNYK KPKLLYCSNG GHFLRILPDG TVDGTRDRSD QHIQLQLSAE SAGEVYIKGT ETGQYLAMDT EGLLYGSQTP NEECLFLERL EENHYNTYTS KKHAEKNWFV GLKKNGSCKR GPRTHYGQKA ILFLPLPVSS D

General References

Jaye M., et al. (1986) Science. 233:541-544. Stauber D J., et al. (2000) Proc Natl Acad Sci. 97:49-54

DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.