

Screening Libraries

Proteins

Product Data Sheet

FGF-1 Protein, Canine

Cat. No.: HY-P75194

Synonyms: Multifunctional fusion protein; HBGF-1; ECGF; FGF1; FGF-a; FGF-acidic

Species: Source: E. coli

J9NTP4 (F16-D155) Accession:

Gene ID: 607724

Molecular Weight: Approximately 16 kDa

PROPERTIES

	_		
AA	Sea	uen	ce

FNLPPGNYMK PKLLYCSNGG HFLRILPDGT VDGTRDRSDQ HIQLQLSAES VGEVYIKSTE TGQYLAMDTD GLLYGSQTPN EECLFLERLE ENHYNTYTSK KHAEKNWFVG LKKNGSCKRG

PRTHYGQKAI LFLPLPVSSD

Biological Activity

Measured in a cell proliferation assay using NIH-3T3 mouse fibroblast cells. The ED₅₀ for this effect is 0.2335 ng/mL, corresponding to a specific activity is 4.28×10⁶ units/mg.

Appearance

Lyophilized powder

Formulation

Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4 or 50 mM Tris-HCL, 300 mM NaCl, pH 7.4.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH₂O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

The FGF-1 protein plays a pivotal role in regulating important cellular processes such as cell survival, division, angiogenesis, differentiation, and migration. In vitro, it exhibits potent mitogenic properties and acts as a ligand for both FGFR1 and integrins. When heparin is present, FGF-1 binds to FGFR1, resulting in the dimerization and activation of FGFR1 through autophosphorylation on tyrosine residues. These phosphorylated residues serve as docking sites for interacting proteins, initiating various signaling cascades. FGF-1 also binds to integrins and forms a ternary complex with integrins and FGFR1,

which is crucial for FGF-1 signaling.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com