

**Product** Data Sheet

# **Screening Libraries**

# Inhibitors

# **Proteins**

# FGF-4 Protein, Human (136a.a)

Synonyms:

Cat. No.: HY-P700288

FGF4; Fibroblast growth factor 4; FGF-4; Transforming protein KS3; Heparin secretory-

transforming protein 1; HST; HSTF-1; Heparin-binding growth factor 4; HBGF-4;

Transforming protein KS3; HST; HSTF1; KS3

Species: Human Source: E. coli

P08620 (S71-L206) Accession:

Gene ID: 2249

Molecular Weight: Approximately16 KDa

# **PROPERTIES**

## **AA Sequence**

SGAGDYLLGI	KRLRRLYCNV	GIGFHLQALP	DGRIGGAHAD
TRDSLLELSP	VERGVVSIFG	VASRFFVAMS	SKGKLYGSPF
FTDECTFKEI	LLPNNYNAYE	SYKYPGMFIA	LSKNGKTKKG

NRVSPTMKVT HFLPRL

# **Biological Activity**

Measured in a cell proliferation assay using NIH-3T3 cells. The ED<sub>50</sub> this effect is 0.1245 ng/mL, corresponding to a specific activity is 8.03×10<sup>6</sup> units/mg.

# **Appearance**

Lyophilized powder

# **Formulation**

Lyophilized from a 0.2 μm filtered solution of PBS, 5% Trehalose, pH 7.4 or 20 mM PB, 150 mM NaCl, pH 7.4.

# **Endotoxin Level**

< 0.1 ng/µg (1 EU/µg) as determined by LAL test.

# Reconsititution

It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH<sub>2</sub>O. 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

FGF-4 Protein assumes a pivotal role in orchestrating embryonic development, cell proliferation, and cell differentiation. Its indispensability is evident in the normal development of limbs and cardiac valves during embryogenesis. Additionally, FGF-4 may contribute to embryonic molar tooth bud development by inducing the expression of key genes, including MSX1, MSX2, and SDC1, in dental mesenchyme cells, thus highlighting its diverse regulatory functions. FGF-4 engages in intricate interactions with FGFR1, FGFR2, FGFR3, and FGFR4, forming molecular alliances critical for signaling cascades. The binding

affinity between FGF-4 and its receptors is potentiated by heparan sulfate glycosaminoglycans, serving as indispensable coreceptors in this complex regulatory network. These interactions underscore the multifaceted and essential role of FGF-4 in driving fundamental processes during development.

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

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Page 2 of 2 www.MedChemExpress.com