

ARG70211 Pig FGF basic recombinant protein (Active) (His-tagged, N-ter)

Package: 100 μg, 20 μg Store at: -20°C

Summary

Product Description	E. coli expressed, His-tagged (N-ter) Active Pig FGF basic recombinant protein
Tested Application	SDS-PAGE
Target Name	FGF basic
Species	Pig
A.A. Sequence	Ala2 - Ser155
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce proliferation in 3T3 cells. The ED50 for this effect is < 2 ng/mL.
Alternate Names	FGF-2; Fibroblast growth factor 2; bFGF; FGFB; Heparin-binding growth factor 2; BFGF; HBGF-2; Basic fibroblast growth factor

Properties

Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/ μg of the protein, as determined by the LAL test.
Purity	> 98% (by SDS-PAGE)
Buffer	PBS containing 0.01% sarkosyl (pH 7.4)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 μ g/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	FGF2
Gene Full Name	fibroblast growth factor 2 (basic)
Background	The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF family members bind heparin and possess broad mitogenic and angiogenic activities. This protein has been implicated in diverse biological processes, such as limb and nervous system development, wound healing, and tumor growth. The mRNA for this gene contains multiple polyadenylation sites, and is alternatively translated from non-AUG (CUG) and AUG initiation codons, resulting in five different isoforms with distinct properties. The CUG-initiated isoforms are localized in the nucleus and are responsible for the intracrine effect, whereas, the AUG-initiated form is mostly cytosolic and is responsible for the paracrine and autocrine effects of this FGF. [provided by RefSeq, Jul 2008]
Function	Plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation

	and cell migration. Functions as potent mitogen in vitro. [UniProt]
Highlight	Related products: <u>FGF basic antibodies;</u> <u>FGF basic ELISA Kits;</u> <u>FGF basic recombinant proteins;</u> Related news: <u>The role of HDGF in tumor angiogenesis</u>
РТМ	Phosphorylation at Tyr-215 regulates FGF2 unconventional secretion.
	Several N-termini starting at positions 94, 125, 126, 132, 143 and 162 have been identified by direct sequencing. [UniProt]
Cellular Localization	Secreted. Nucleus. Note=Exported from cells by an endoplasmic reticulum (ER)/Golgi-independent mechanism. Unconventional secretion of FGF2 occurs by direct translocation across the plasma membrane. Binding of exogenous FGF2 to FGFR facilitates endocytosis followed by translocation of FGF2 across endosomal membrane into the cytosol. Nuclear import from the cytosol requires the classical nuclear import machinery, involving proteins KPNA1 and KPNB1, as well as CEP57. [UniProt]

Images

