Cytokines

Human Recombinant FGF-8A

Fibroblast growth factor 8A

Catalog #	78128	10 µg
	78128.1	50 µg
	78128.2	1000 µg

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Product Description

Fibroblast growth factor 8A (FGF-8A) is a member of the fibroblast growth factor (FGF) family and is an isoform of FGF-8. FGF-8A binds the FGF receptor (FGFR) and activates Ras/MAPK signaling (Hulstrand & Houston). The FGF family possesses broad mitogenic and cell survival activities (Folkman & Klagsbrun; Kimelman & Kirschner) and is involved in a variety of biological processes, including cell proliferation, differentiation, survival, and apoptosis (Folkman & Klagsbrun; Klagsbrun; Rifkin & Moscatelli). FGF-8 RNA is spliced to produce 4 protein isoforms in humans: FGF-8A, FGF-8B, FGF-8E, and FGF-8F. The functional differences are not fully understood; however, studies in zebrafish and Xenopus show that FGF-8A is required for endoderm morphogenesis and neurogenesis (Choe & Crump; Hulstrand & Houston).

Product Information

Alternative Names:	AIGF, AIGFKAL6, Androgen-induced growth factor, FGF8, FGF-8, Fibroblast growth factor 8 (androgen-induced), Fibroblast growth factor 8, HBGF-8, Heparin-binding growth factor 8, MGC149376
Accession Number:	P55075
Amino Acid Sequence:	MQHVREQSLV TDQLSRRLIR TYQLYSRTSG KHVQVLANKR INAMAEDGDP FAKLIVETDT FGSRVRVRGA ETGLYICMNK KGKLIAKSNG KGKDCVFTEI VLENNYTALQ NAKYEGWYMA FTRKGRPRKG SKTRQHQREV HFMKRLPRGH HTTEQSLRFE FLNYPPFTRS LRGSQRTWAP EPR
Predicted Molecular Mass:	21.3 kDa
Species:	Human
Cross Reactivity:	Mouse
Formulation:	Lyophilized after dialysis against phosphate-buffered saline.
Source:	E. coli

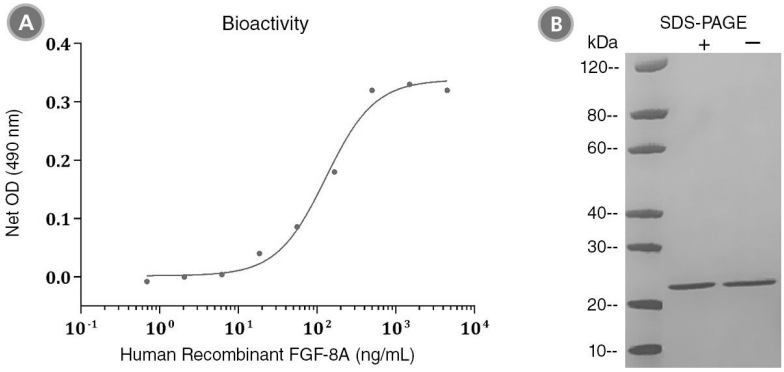
Specifications

Activity:	The specific activity is ≥ 2 × 10^3 units/mg (EC50 ≤ 500 ng/mL) as determined by a cell proliferation assay using 3T3 cells in the presence of 1 µg/mL heparin.
Purity:	≥ 95%
Endotoxin Level:	Measured by kinetic Limulus amebocyte lysate (LAL) analysis and is ≤ 0.2 EU/µg protein.

Preparation and Storage

Storage:	Store at -80°C.
Stability:	Stable as supplied for 12 months from date of receipt.
Preparation:	Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.1 mg/mL by pipetting the solution down the sides of the vial. Do not vortex. As a general guide, do not store at 2 - 8°C for more than 2 weeks or at -20°C for more than 3 months. Avoid repeated freeze-thaw cycles.

Data



(A) The biological activity of Human Recombinant FGF-8A was tested by its ability to promote the proliferation of 3T3 cells in the presence 1 µg/ml of heparin. Cell proliferation was measured using a fluorometric assay method. The EC50 is defined as the effective concentration of the growth factor at which cell proliferation is at 50% of maximum. The EC50 in the example above is less than 500 ng/mL.
(B) 2 µg of Human Recombinant FGF-8A was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions and visualized by Coomassie Blue staining. Human Recombinant FGF-8A has a predicted molecular mass of 21.3 kDa.

Related Products

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References

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