Cytokines

Human Recombinant FGF-8B

Fibroblast growth factor 8B

Catalog #	78008	10 µg
	78008.1	50 µg
	78008.2	1000 µg

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Product Description

Fibroblast growth factor 8B (FGF-8B) is a member of the fibroblast growth factor (FGF) family and is an isoform of FGF-8. Cytokines in the FGF family possess broad mitogenic and cell survival activities (Folkman & Klagsbrun; Kimelman & Kirschner) and are involved in a variety of biological processes, including cell proliferation, differentiation, survival, and apoptosis (Folkman & Klagsbrun; Klagsbrun; Rifkin & Moscatelli). FGF-8B signals through FGF receptors (FGFRs) to activate PI3K and MAPK pathways. FGF-8B is broadly associated with mitogenic and cell survival activities, and regulates gastrulation, epithelial-mesenchymal transition, and later on mesenchymal to epithelial differentiation during embryonic development. FGF-8B has also been found in peripheral blood leukocytes and healthy bone marrow samples (Mattila & Härkönen). FGF-8B has mitogenic effects on somatic cells in the germinal epithelium and is expressed in adult mouse ovarian cells and tissues, which suggests that it regulates maturation of oocytes and seminiferous epithelium in testis (Valve et al.).

Product Information

Alternative Names:	AIGF, Androgen-induced growth factor, FGF-8, FGF-8B, Fibroblast growth factor-8B, HBGF-8, Heparin-binding growth factor 8; HH6, KAL6
Accession Number:	P55075
Amino Acid Sequence:	MQVTVQSSPN FTQHVREQSL VTDQLSRRLI RTYQLYSRTS GKHVQVLANK RINAMAEDGD PFAKLIVETD TFGSRVRVRG AETGLYICMN KKGKLIAKSN GKGKDCVFTE IVLENNYTAL QNAKYEGWYM AFTRKGRPRK GSKTRQHQRE VHFMKRLPRG HHTTEQSLRF EFLNYPPFTR SLRGSQRTWA PEPR
Predicted Molecular Mass:	22.5 kDa
Species:	Human
Cross Reactivity:	Mouse, Rat
Formulation:	Lyophilized after dialysis against phosphate-buffered saline.
Source:	E. coli

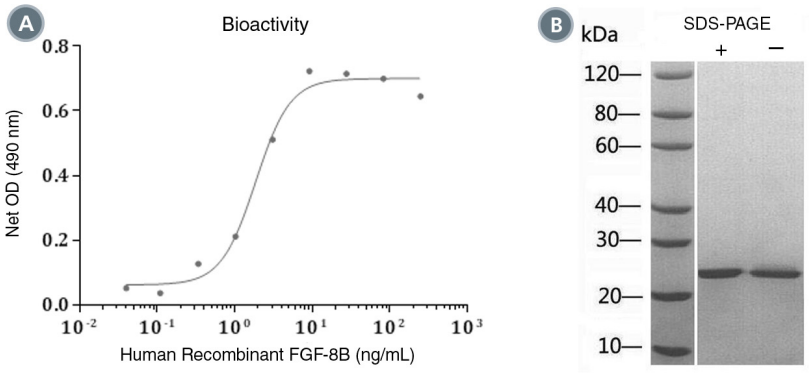
Specifications

Activity:	The specific activity is ≥ 2 x 10^5 units/mg (EC50 ≤ 5 ng/mL) as determined by a cell proliferation assay using BALB/c 3T3 cells in the presence of 1 µg/mL of 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. Store at 2 - 8°C for up to 2 weeks or at -20°C to -80°C for up to 3 months. Avoid repeated freeze-thaw cycles.

Data



(A) The biological activity of Human Recombinant FGF-8B was tested by its ability to promote the proliferation of BALB/c 3T3 cells. 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 above example is 1.8 ng/mL.
(B) 2 µg of Human Recombinant FGF-8B was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions and visualized by Coomassie Blue staining. Human Recombinant FGF-8B has a predicted molecular mass of 22.5 kDa.

Related Products

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References

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