

Recombinant Murine Fibroblast Growth Factor 8

#R00255

Size: 5 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.

- 1 month, 2 to 8 °C under sterile conditions after reconstitution.

- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Murine FGF-8 is a heparin binding growth factor belonging to the FGF family, which plays a central role during prenatal development, postnatal growth and regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. Murine FGF-8 is first purified from an androgen-dependent mouse mammary carcinoma cell line as an androgen induces secretion. Cloning and analysis of the murine FGF8 gene revealed at least eight potential protein isoforms (FGF-8a-h). Murine FGF-8a and b share 100 % amino acid identity with that in humans, and murine FGF-8e and f share 98 % amino acid identity with humans. None of the FGF-8 isoforms exhibited activity to FGFR1b, 2b, 3b, but FGFR2c, 3c and FGFR4 can be activated by several FGF-8 isoforms. FGF-8 plays an important role in the regulation of embryonic development, cell proliferation, cell differentiation and cell migration, and it is required for normal brain, eye,

ear and limb development during embryogenesis.

AA Sequence

QVRSAAQKRGPAGAGNPADTLGQGHEDRPFQQRSR
AGKNFTNPAPNYPEEGSKEQRDSVLPKVTQRHVRE
QSLVTDQLSRRLIRTYQLYSRTSGKHVQVLANKRINA
MAEDGDPFAKLIVETDTFGSRVRVRGAETGLYICMNK
KGKLIAKSNGKGKDCVFTEIVLENNYTALQNAKYEGW
YMAFTRKGRPRKGSKTRQHQREVHFMKRLPRGHHT
TEQSLRFEFLNYPPFTRSLRGSQRTWAPEPR

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	AIGF, HBGF-8, FGF-8c
Accession	P37237
GeneID	14179
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 28.1 kDa, a single non-glycosylated polypeptide chain containing 246 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine balb/c 3T3 cells is less than 5.0 ng/ml, corresponding to a specific activity of > 2.0 × 10 ⁵

	IU/mg in the presence of 10 μg/ml of heparin.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4, 500 mM NaCl.
Endotoxin	Less than 1 EU/μg of rMuFGF-8 as determined by LAL method.
