

Recombinant Human Keratinocyte Growth Factor-2/FGF-10

#R00110

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

Fibroblast growth factor 10 belongs to the fibroblast growth factor (FGF) family which is involved in a variety of biological processes such as embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. Like most other FGF family members, FGF-10 also has a heparin-binding domain and it plays an important role in the regulation of embryonic development, cell proliferation and cell differentiation. In addition, FGF-10 may play a role in wound healing and is required for normal branching morphogenesis. Recombinant human FGF-10 contains a 208 amino acids and it shares 92 % and 95 % amino acid sequence identity with murine and rat FGF-10. Defects in FGF-10 are the cause of autosomal dominant aplasia of lacrimal and salivary glands and lacrimo-auriculo-dento-digital syndrome.

AA Sequence

LGQDMVSPEATNSSSSSFSSPSSAGRHVRSYNHLQ
GDVRWRKLFSTKYFLKIEKNGKVSGETKKENCPYSIL
EITSVEIGVVAVKAINSNYLLAMNKKGKLYGSKEFNND
CKLKERIEENGYNTYASFNWQHNGRQMYVALNGKG
APRRGQKTRRKNTSAHFLPMVVHS

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

Accession	O15520
GeneID	2255
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 19.1 kDa, a single, non-glycosylated polypeptide chain containing 169 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 thymidine uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10 ⁶ IU/mg.

Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 2 × PBS, pH 7.4.
Endotoxin	Less than 1 EU/μg of rHuKGF-2/FGF-10 as determined by LAL method.