

Recombinant Human Fibroblast Growth Factor 16

#R00113

Size: 5 µg/100 µg/500 µg

Stability & Storage

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

- 6 months from date of receipt, -20 to -70 °C as supplied.
- 3 months, -20 to -70 °C under sterile conditions after opening.



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 16 (FGF-16) belongs to the large FGF family. All FGF family members are heparin-binding growth factors with a core 120 amino acid (a.a.) FGF domain that allows for a common tertiary structure. FGF-16 was originally identified in rat heart tissue by homology based polymerase chain reaction. Human FGF-16 cDNA predicts a 207 aa precursor protein with one N-linked glycosylation site. FGF-16 lacks a typical signal peptide, but is efficiently generated by mechanisms other than the classical protein secretion pathway. Among FGF family members, FGF-16 is most similar to FGF-9, sharing 73% aa sequence homology. Human FGF-16 shares 99% and 98.6% aa sequence identity with the mouse and rat FGF-16, respectively.

AA Sequence

AEVGGVFASLDWDLHGFSSSLGNVPLADSPGFLNER

LGQIEGKLQRGSPTDFAHLKGILRRRQLYCRTGFHLEI
FPNGTVHGTTRHDHSRFGILEFISLAVGLISIRGVDSGL
YLG MNERGELYGSKKLTRECVFREQFEENWYNTYAS
TLYKHSDSERQYYVALNKDGSPREGYRTRHQKFTH
FLPRPVDPSKLPMSRDLFHYR

Product Specification

Accession	O43320
GeneID	8823
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 23.6 kDa, a single non-glycosylated polypeptide chain containing 206 amino acids.
Purity	> 98 % 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 Colorless liquid.
Appearance	
Formulation	Supplied as a 0.2 µm filtered solution in 20 mM Tris-HCl, 1 M NaCl, pH 9.0, with 0.02 % Tween-20, 10 % Glycerol.
Endotoxin	Less than 0.1 EU/µg of rHuFGF-16 as determined by LAL method.