

Rev03 DATASHEET

Update: Dec,14,2021

## FGF-16, Human

Cat. No.: Z03288

## **Product Introduction**

Species	Human
Protein Construction	FGF-16 (Ala2-Arg207) Accession # 043320
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/µg of protein by gel clotting method
Biological Activity	Measured in a cell proliferation assay using 3T3 mouse fibroblast cell, the ED $_{50}$ for this effect is < 20.0 ng/ml.
Expression System	СНО
Apparent Molecular Weight	~23 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, 5mM EDTA, pH 7.5.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in distilled water up to 100 $\mu$ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## **Background**

Target Background: Fibroblast Growth Factor-16 (FGF-16) is a heparin binding growth factor, a member of the FGF family. All FGF family members are heparinbinding growth factors with a core 120 amino acid (aa) FGF domain that allows for a common tertiary structure. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. The rat homolog is predominantly expressed in embryonic brown adipose tissue and has significant mitogenic activity, which suggests a role in proliferation of embryonic brown adipose tissue. FGF-16 is most similar to FGF-9 (73 % amino acid identity). The protein sequence of human FGF-16 displays 98.6% identity with rat FGF-16. Chimpanzee FGF-16 (207 amino acids), chicken FGF-16 (207 amino acids), and zebrafish FGF-16 (203 amino acids) show 100 %, 89.9 %, and 79.2 % total amino acid identity with human FGF-16.

## GenScript USA, Inc.



**Synonyms:** FGF16; Fibroblast Growth Factor-16; FGFG

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