

FGF-16

Catalog # PVGS1476

Specification

FGF-16 - Product Information

Primary Accession Species Human

<u>043320</u>

Sequence Ala2-Arg207

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 ED₅₀ for this effect is < 20.0 ng/ml.

Expression System CHO

Formulation

Reconstitution

Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 5mM EDTA, pH 7.5.

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 μ 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.

FGF-16 - Additional Information

Gene ID 8823

Other Names Fibroblast growth factor 16, FGF-16, FGF16

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.

FGF-16 - Protein Information

Name FGF16

Function

Plays an important role in the regulation of embryonic development, cell proliferation and cell differentiation, and is required for normal cardiomyocyte proliferation and heart development.

Cellular Location Secreted {ECO:0000250|UniProtKB:054769}.

FGF-16 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

FGF-16 - Images