

Product Information

Catalog Number	KD-020
Species	Human
Protein Construction	FGF-16 (Ala2-Arg207), Accession # O43320
Tag	No tag
Expression System	<i>E. coli</i>
Purity	> 95% as determined by SDS-PAGE
Predicted Molecular Mass	24 kDa
SDS-PAGE	23 kDa, under reducing conditions
Endotoxin	<0.1 EU/μg of the protein by the LAL method
Biological Activity	Measured in a cell proliferation assay using Balb/ 3T3 cells. The ED50 for this effect is <30 ng/mL.
Formulation	Lyophilized from a 0.22μm filtered solution in PBS with EDTA
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder at 100 μg/mL in sterile deionized water
Storage & Stability	Use a manual defrost freezer and avoid repeated freeze-thaw cycles 12 months from date of receipt, at lower than -70 °C as supplied 1 week, 2 to 8 °C under sterile conditions after reconstitution 1 month, -20 to -70 °C under sterile conditions after reconstitution
Usage	Research use only

Product Data

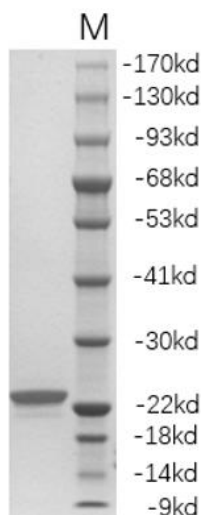


Figure 1. SDS-PAGE analysis with 2 μ g recombinant human FGF-16 per lane, under reducing conditions, showing bands at 23 kDa

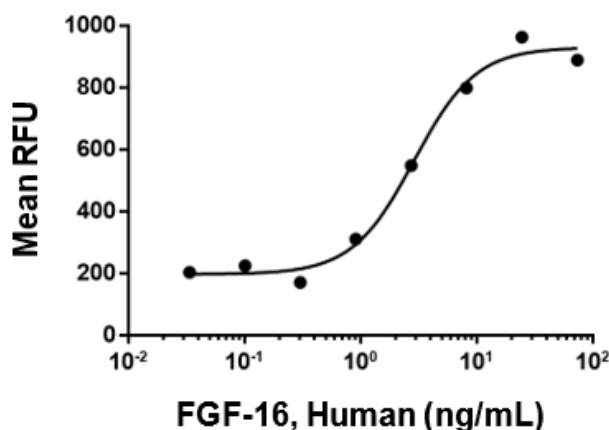


Figure 2. Biological activity measured in a cell proliferation assay using Balb/ 3T3 cells, ED₅₀ for this effect is <30 ng/mL

Background

Fibroblast Growth Factor-16 (FGF-16) is a heparin binding growth factor, a member of the FGF family. All FGF family members are heparin binding 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.