

Product Datasheet

RecombinantFGF-16, Human (orb1494749)

Catalog Number orb1494749

Category Proteins

Description 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.Recombinant human FGF-16 produced in CHO cells is a polypeptide chain containing 206 amino acids. A fully biologically active molecule, rhFGF-16 has a molecular mass of 23 kDa analyzed by reducing SDS-PAGE and is obtained by

chromatographic techniques at GenScript.

Form/Appearance Lyophilized after extensive dialysis against PBS.

Buffer/Preservatives Lyophilized after extensive dialysis against PBS.

Purity > 95% as analyzed by SDS-PAGE and HPLC.

Purification > 95% as analyzed by SDS-PAGE and HPLC.

Protein Sequence AEVGGVFASLDWDLHGFSSSLGNVPLADSPGFLNERLGQIEGKLQRGSPTDFAHLKGILRR

ROLYCRTGFHLEIFPNGTV

HGTRHDHSRFGILEFISLAVGLISIRGVDSGLYLGMNERGELYGSKKLTRECVFREQFEENW

YNTYASTLYKHSDSERQY

YVALNKDGSPREGYRTKRHQKFTHFLPRPVDPSKLPSMSRDLFHYR

Biorbyt Ltd.

7 Signet Court, Swann Road Cambridge CB5 8LA United Kingdom

Email: <u>info@biorbyt.com</u>, <u>support@biorbyt.com</u> Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

Biorbyt LLC

68 TW Alexander Drive Research Triangle Park

Durham NC 27713 United States

Email: <u>info@biorbyt.com</u>, <u>support@biorbyt.com</u> Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558





MW 23 kDa, observed by reducing SDS-PAGE.

Application notes Reconstituted in ddH2O or PBS at 100 μg/ml.

Endotoxins 0.2 EU/μg, determined by LAL method.

Source CHO

Biological Activity Measured in a cell proliferation assay using 3T3 mouse fibroblast cell, The ED50

for this effect is 20 ng/mL.

Storage Lyophilized recombinant Human Fibroblast Growth Factor-16 remains stable up

to 6 months at -80°C from date of receipt. Upon reconstitution, Human Fibroblast Growth Factor-16 should be stable up to 1 week at 4°C or up to 3 months at -

20°C.

Note For research use only

Biorbyt Ltd.

7 Signet Court, Swann Road Cambridge CB5 8LA United Kingdom

Email: <u>info@biorbyt.com</u>, <u>support@biorbyt.com</u> Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

Biorbyt LLC

68 TW Alexander Drive Research Triangle Park Durham NC 27713 United States

Email: <u>info@biorbyt.com</u>, <u>support@biorbyt.com</u> Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558