

# **Product Datasheet**

# RecombinantFGF-8a, Human (orb1494876)

Catalog Number orb1494876

**Category** Proteins

**Description** Fibroblast Growth Factor 8a (FGF-8a) is a cytokine belonging to the heparin-

binding FGF family, which has at least 23 members. FGF-8 has 8 different

isoforms, named FGF-8a through FGF-8h. Different FGF-8 isoforms have different affinities to the receptors, and thus participate in different signaling cascade

pathways. FGF-8 has very widespread expression during embryonic

development, and is an organizer and inducer for gastrulation, somitogenesis,

morphogenesis, and limb induction. However, FGF-8 is also a potential oncogene: in normal adult cells, FGF-8 has very low expression, but FGF-8 is highly expressed in cancer cells of breast, prostate, and ovarian tumors. FGF-8 promotes tumor angiogenesis by increasing neovascularization, and induces osteoblastic differentiation. Recombinant human Fibroblast Growth Factor 8a (rhFGF-8a) produced inE.coli is a single non-glycosylated polypeptide chain containing 183 amino acids. A fully biologically active molecule, rhFGF-8a has a molecular mass of 21.3 kDa analyzed by reducing SDS-PAGE and is obtained by

proprietary chromatographic techniques at GenScript.

**Form/Appearance** Lyophilized after extensive dialysis against PBS.

**Buffer/Preservatives** Lyophilized after extensive dialysis against PBS.

**Purity** > 95% by SDS-PAGE analysis.

**Purification** > 95% by SDS-PAGE analysis.

Protein Sequence MQHVREQSL VTDQLSRRLI RTYQLYSRTS GKHVQVLANK RINAMAEDGD PFAKLIVETD

TFGSRVRVRG AETGLYICMN KKGKLIAKSN GKGKDCVFTE IVLENNYTAL QNAKYEGWYM AFTRKGRPRK GSKTRQHQRE VHFMKRLPRG HHTTEQSLRF

EFLNYPPFTR SLRGSQRTWA PEPR

**MW** 21.3 kDa, observed by reducing SDS-PAGE.

#### **Biorbyt Ltd.**

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

$$\begin{split} & \text{Email: } \underline{\text{info@biorbyt.com}}, \underline{\text{support@biorbyt.com}} \\ & \text{Phone: } \underline{+44\ (0)1223\ 859353} \mid \text{Fax: } \underline{+1\ (415)\ 651\text{-}8558} \end{split}$$

#### **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





**Application notes** Reconstituted in ddH2O at 100 μg/mL.

**Endotoxins** 0.2 EU/μg, determined by LAL method.

**Source** Escherichia coli.

**Biological Activity** ED50  $2 \times 10^3$  units/mg.

**Storage** Lyophilized recombinant human Fibroblast Growth Factor 8a (rhFGF-8a) remains

stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rhFGF-

8a remains stable up to 2 weeks 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