

Rev04  
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## DATASHEET

# FGF-8a, Human

Cat. No.: Z03172

## Product Introduction

|                                  |  |
|----------------------------------|--|
| <b>Species</b>                   | Human  |
| <b>Protein Construction</b>      | Expressed with an N-terminal Met.  |
|                                  | <b>FGF-8a (Gln23-Arg204)</b><br>Accession # P55075   |
| <b>Purity</b>                    | > 95% as analyzed by SDS-PAGE  |
| <b>Endotoxin Level</b>           | < 0.2 EU/μg of protein by gel clotting method  |
| <b>Biological Activity</b>       | ED <sub>50</sub> < 500.0 ng/ml, measured by a cell proliferation assay using 3T3 cells in the presence of 1.0 μg/ml of heparin, corresponding to a specific activity of > 2.0 × 10 <sup>3</sup> units/mg.  |
| <b>Expression System</b>         | E. coli  |
| <b>Apparent Molecular Weight</b> | ~21.3 kDa, on SDS-PAGE under reducing conditions.  |
| <b>Formulation</b>               | Lyophilized after extensive dialysis against PBS.  |
| <b>Reconstitution</b>            | It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O up to 100 μg/ml.   |
| <b>Storage &amp; Stability</b>   | 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 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.

**Synonyms :** AIGFa; HBGF-8a

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**

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