

**FGF-8a**  
**Catalog # PVGS1371****Specification**

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**FGF-8a - Product Information**

Primary Accession [P55075](#)  
**Species**  
Human

**Sequence**  
Gln23-Arg204, expressed with an N-terminal Met

**Purity**  
> 95% as analyzed by SDS-PAGE

**Endotoxin Level**  
< 0.2 EU/ µg of protein by gel clotting method

**Biological Activity**  
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.

**Expression System**  
E. coli

Formulation **Lyophilized after extensive dialysis against PBS.**

**Reconstitution**  
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.

**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-8a - Additional Information**

**Gene ID** 2253

**Other Names**  
Fibroblast growth factor 8, FGF-8, Androgen-induced growth factor, AIGF, Heparin-binding growth factor 8, HBGF-8, FGF8, AIGF

**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.

## **FGF-8a - Protein Information**

**Name** FGF8

**Synonyms** AIGF

### **Function**

Plays an important role in the regulation of embryonic development, cell proliferation, cell differentiation and cell migration. Required for normal brain, eye, ear and limb development during embryogenesis. Required for normal development of the gonadotropin-releasing hormone (GnRH) neuronal system (PubMed:<a href="http://www.uniprot.org/citations/16384934" target="\_blank">16384934</a>, PubMed:<a href="http://www.uniprot.org/citations/16597617" target="\_blank">16597617</a>, PubMed:<a href="http://www.uniprot.org/citations/8663044" target="\_blank">8663044</a>). Plays a role in neurite outgrowth in hippocampal cells (PubMed:<a href="http://www.uniprot.org/citations/21576111" target="\_blank">21576111</a>).

### **Cellular Location**

Secreted.

## **FGF-8a - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **FGF-8a - Images**