

FGF-8a Catalog # PVGS1371

## **Product Information**

Primary Accession Species	P55075 Human
Sequence	Gln23-Arg204, expressed with an N-terminal Met
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level Expression System	E. coli
Formulation Reconstitution	Lyophilized after extensive dialysis against PBS. 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 g/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.

## **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.

## **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: <u>16384934</u> , PubMed: <u>16597617</u> , PubMed: <u>8663044</u> ). Plays a role in neurite outgrowth in hippocampal cells (PubMed: <u>21576111</u> ).
Cellular Location	Secreted.

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