

FGF-8a

Catalog # PVGS1371

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

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_2O up to 100 $\square g/ml$.

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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