

Recombinant Human Fibroblast Growth Factor- acidic (rHu aFGF)

Catalog No: #70401

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

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| Product Name | Recombinant Human Fibroblast Growth Factor- acidic (rHu aFGF) |
| Brief Description | Recombinant Protein |
| Host Species | E.coli |
| Purification | > 95 % by SDS-PAGE and HPLC analyses. |
| Species Reactivity | Hu |
| Target Name | rHu aFGF |
| Other Names | FGF-1, ECGF, HBGF-1 |
| Accession No. | accession:P05230 GeneID:2246 |
| Uniprot | P05230 |
| GeneID | 2246; |
| Calculated MW | Approximately 16.0 kDa, a sing |
| SDS-PAGE MW | Sterile Filtered White lyophil |
| Target Sequence | MFNLPPGNYK KPKLLYCSNG GHFLRILPDG TVDGTRDRSD QHIQLQLSAE SVGEVYIKST ETGQYLAMDT DGLLYGSQTP NEECLFLERL EENHYNTYIS KKHAEKWVFLV GLKKNKNGSCKR GPRTHYGGKA ILFLPLPVSS D |
| Formulation | Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4. |
| Storage | This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze thaw cycles. |

Background

Human aFGF, encoded by the FGF1 gene, is a member of the fibroblast growth factor (FGF) family. Fibroblast growth factor was found in pituitary extracts in 1973 and then tested in a bioassay that caused fibroblasts to proliferate. After further fractionating the extract using acidic and basic pH, two different forms have isolated that named "acidic fibroblast growth factor" (FGF-1) and "basic fibroblast growth factor" (FGF-2). Human aFGF shares 54 % amino acid sequence identity with bFGF. In mammalian FGF receptor family has 4 members, FGFR1, FGFR2, FGFR3, and FGFR4, and 1, 2, 3 have 2 sub-types α 1/2 and β 1/2. aFGF can bind and activate all 7 different FGFRs. Affinity between aFGF and its receptors can be increased by heparin or heparan sulfate proteoglycan. aFGF plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. aFGF are also involved in a variety of biological processes, including embryonic development , morphogenesis, tissue repair, tumor growth and invasion.

References

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Note: This product is for in vitro research use only