

## AR50023PU-S

## Human FGF basic / FGF2 (143-288) (recombinant) - Purified

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| <b>Alternate names:</b>  | BFGF, FGFB, Fibroblast growth factor 2 (basic), HBGF-2, HBGF2, Heparin-binding growth factor 2                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Quantity:</b>         | 50 µg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Concentration:</b>    | 1 mg/ml (determined by Bradford assay)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Background:</b>       | Fibroblast growth factor 2 (FGF2) is a member of the FGF family that binds heparin and plays important roles in morphogenic, neurotrophic and angiogenic processes. FGF2 possess diverse biological functions, such as neuron differentiation, embryonic development and differentiation, modulation of angiogenesis, and wound healing.                                                                                                                                                                                     |
| <b>Uniprot ID:</b>       | <a href="#">P09038</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>NCBI:</b>             | <a href="#">NP_001997.5</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>GeneID:</b>           | <a href="#">2247</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Species:</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Source:</b>           | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Format:</b>           | <b>State:</b> Liquid purified protein<br><b>Purity:</b> >95% by SDS - PAGE<br><b>Buffer System:</b> 50 mM Tris pH 8.0 Molecular Weight: 16.5 kDa (147 aa)<br><b>Endotoxin Level:</b> < 1.0 EU per 1 microgram of protein (determined by LAL method)                                                                                                                                                                                                                                                                          |
| <b>Description:</b>      | Recombinant human FGF2 was expressed in E.coli and purified by conventional chromatography techniques.<br><b>AA Sequence:</b><br>MPALPEDGGS GAFPPGHFKD PKRLYCKNGG FFLRIHPDGR VDGVREKSDP HIKLQLQAEERGVVSIKGVCANRYLAMKED GRLLASKCVT DECFFFERLE SNNYNTYRSR KYTSWYVALKRTGQYKLGSK TGPQKAILF LPMSAKS<br><b>Specific Activity:</b> Measured in a cell proliferation assay using NIH-3T3 mouseembryonic fibroblast. The ED50 for this effect is 0.1-1.5 ng/ml.<br><b>Molecular weight:</b> 16.5 kDa (147aa), confirmed by MALDI-TOF. |
| <b>Storage:</b>          | Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.<br>Avoid repeated freezing and thawing.<br>Shelf life: one year from despatch.                                                                                                                                                                                                                                                                                                                                                          |
| <b>General Readings:</b> | Nakayama T., et al. (2007) Blood. 109(2):1363-72.A E Eriksson., et al. (1991) PNAS. 88: 3441-3445                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Protocols:</b>        | 1. Cell line: NIH-3T3 (Mus mosculus/Mouse embryonic fibroblast)<br><br>2. Maintenance Condition: RPMI 1640 containing 10% FBS<br><br>3. Assay medium: serum free RPMI 1640                                                                                                                                                                                                                                                                                                                                                   |

4. Cell density: 2 x 10,000 cells/well (96 well plate, final volume 100ul)
5. Incubation time : 24 hr (after sample treatment)
6. Concentration range: 10 pg/ml - 1 ug/ml
7. Detection method : BrdU assay

**Pictures:**

