

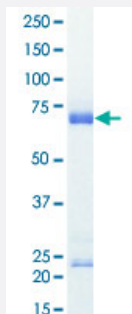
Bioactive

## FGFR3 (Human) Recombinant Protein

Catalog # P5551

Size 5 ug

### Applications



### Result of activity analysis

Result of activity analysis

□

### Specification

|                             |                                                                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>  | Human FGFR3 (NP_000133.1, 436 a.a. - 806 a.a.) partial recombinant protein with GST tag expressed in baculovirus infected Sf21 cells. |
| <b>Host</b>                 | insect                                                                                                                                |
| <b>Theoretical MW (kDa)</b> | 68                                                                                                                                    |
| <b>Form</b>                 | Liquid                                                                                                                                |
| <b>Preparation Method</b>   | Baculovirus infected insect cell (Sf21) expression system                                                                             |
| <b>Purification</b>         | Glutathione sepharose chromatography                                                                                                  |
| <b>Purity</b>               | 74 % by SDS-PAGE/CBB staining                                                                                                         |

|                         |                                                                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Activity                | The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg(or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip 3000. Substrate: CSKtide. ATP: 100 uM. |
| Quality Control Testing | Loading 1 ug protein in SDS-PAGE                                                                                                                                                                                                                                             |
| Storage Buffer          | In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.1% CHAPS, 1 mM DTT, 10% glycerol)                                                                                                                                                                                                  |
| Storage Instruction     | Store at -80°C.<br>Aliquot to avoid repeated freezing and thawing.                                                                                                                                                                                                           |
| Note                    | Result of activity analysis<br>Result of activity analysis                                                                                                                                                                                                                   |

## Applications

- Functional Study
- SDS-PAGE

## Gene Info — FGFR3

|                    |                                                                                                                                                                                                                                       |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entrez GeneID      | <a href="#">2261</a>                                                                                                                                                                                                                  |
| Protein Accession# | <a href="#">NP_000133.1</a>                                                                                                                                                                                                           |
| Gene Name          | FGFR3                                                                                                                                                                                                                                 |
| Gene Alias         | ACH, CD333, CEK2, HSGFR3EX, JTK4                                                                                                                                                                                                      |
| Gene Description   | fibroblast growth factor receptor 3                                                                                                                                                                                                   |
| Omim ID            | <a href="#">100800</a> <a href="#">109800</a> <a href="#">134934</a> <a href="#">146000</a> <a href="#">149730</a> <a href="#">162900</a> <a href="#">187600</a> <a href="#">602849</a> <a href="#">603956</a> <a href="#">610474</a> |
| Gene Ontology      | <a href="#">Hyperlink</a>                                                                                                                                                                                                             |

**Gene Summary**

This gene encodes a member of the fibroblast growth factor receptor (FGFR) family, with its amino acid sequence being highly conserved between members and among divergent species. FGFR family members differ from one another in their ligand affinities and tissue distribution. A full-length representative protein would consist of an extracellular region, composed of three immunoglobulin-like domains, a single hydrophobic membrane-spanning segment and a cytoplasmic tyrosine kinase domain. The extracellular portion of the protein interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. This particular family member binds acidic and basic fibroblast growth hormone and plays a role in bone development and maintenance. Mutations in this gene lead to craniosynostosis and multiple types of skeletal dysplasia. Three alternatively spliced transcript variants that encode different protein isoforms have been described. [provided by RefSeq]

**Other Designations**

OTTHUMP00000149959|achondroplasia, thanatophoric dwarfism|hydroxyaryl-protein kinase|tyrosine kinase JTK4

**Pathway**

- [Bladder cancer](#)
- [Endocytosis](#)
- [MAPK signaling pathway](#)
- [Pathways in cancer](#)
- [Regulation of actin cytoskeleton](#)

**Disease**

- [Achondroplasia](#)
- [Alzheimer disease](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cheilitis](#)
- [Chromosome Aberrations](#)
- [Chromosome Deletion](#)
- [Cleft Lip](#)
- [Cleft Palate](#)

- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Craniosynostoses](#)
- [Diabetes Complications](#)
- [Disease Progression](#)
- [Genetic Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Intracranial Hypertension](#)
- [Kidney Neoplasms](#)
- [Lung Neoplasms](#)
- [Metabolic Syndrome X](#)
- [Musculoskeletal Abnormalities](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Osteochondrodysplasias](#)
- [Osteoporosis](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Recurrence](#)
- [Skin Neoplasms](#)
- [Sleep Apnea](#)
- [Syndrome](#)
- [Thanatophoric Dysplasia](#)

- [Ureteral Neoplasms](#)
- [Urinary Bladder Neoplasms](#)