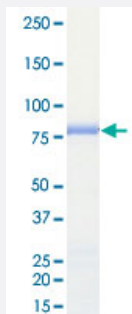


Bioactive

# RET (M918T) (Human) Recombinant Protein

Catalog # P5631      Size 5 ug

## Applications



## Result of activity analysis

Result of activity analysis

□

## Specification

|                             |                                                                                                                                                   |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>  | Human RET (NP_000314.1, 658 a.a. - 1114 a.a.) M918T mutant partial recombinant protein with GST tag expressed in baculovirus infected Sf21 cells. |
| <b>Host</b>                 | insect                                                                                                                                            |
| <b>Theoretical MW (kDa)</b> | 79                                                                                                                                                |
| <b>Form</b>                 | Liquid                                                                                                                                            |
| <b>Preparation Method</b>   | Baculovirus infected insect cell (Sf21) expression system                                                                                         |
| <b>Purification</b>         | Glutathione sepharose chromatography                                                                                                              |
| <b>Purity</b>               | 92 % by SDS-PAGE/CBB staining                                                                                                                     |

|                                |                                                                                                                                                                                                                                                                              |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Activity</b>                | 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. |
| <b>Quality Control Testing</b> | Loading 1 ug protein in SDS-PAGE                                                                                                                                                                                                                                             |
| <b>Storage Buffer</b>          | In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)                                                                                                                                                                                                |
| <b>Storage Instruction</b>     | Store at -80°C.<br>Aliquot to avoid repeated freezing and thawing.                                                                                                                                                                                                           |
| <b>Note</b>                    | Result of activity analysis<br>Result of activity analysis                                                                                                                                                                                                                   |

## Applications

- Functional Study
- SDS-PAGE

## Gene Info — RET

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Entrez GeneID</b>      | <a href="#">5979</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Protein Accession#</b> | <a href="#">NP_000314.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Gene Name</b>          | RET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Gene Alias</b>         | CDHF12, HSCR1, MEN2A, MEN2B, MTC1, PTC, RET-ELE1, RET51                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gene Description</b>   | ret proto-oncogene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Omim ID</b>            | <a href="#">142623</a> <a href="#">155240</a> <a href="#">162300</a> <a href="#">164761</a> <a href="#">171300</a> <a href="#">171400</a> <a href="#">209880</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Gene Ontology</b>      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Gene Summary</b>       | This gene, a member of the cadherin superfamily, encodes one of the receptor tyrosine kinases, which are cell-surface molecules that transduce signals for cell growth and differentiation. This gene plays a crucial role in neural crest development, and it can undergo oncogenic activation in vivo and in vitro by cytogenetic rearrangement. Mutations in this gene are associated with the disorders multiple endocrine neoplasia, type IIA, multiple endocrine neoplasia, type IIB, Hirschsprung disease, and medullary thyroid carcinoma. Two transcript variants encoding different isoforms have been found for this gene. Additional transcript variants have been described but their biological validity has not been confirmed. [provided by RefSeq] |

**Other Designations**

RET transforming sequence|cadherin family member 12|hydroxyaryl-protein kinase|oncogene RET|receptor tyrosine kinase|ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease)

**Pathway**

- [Endocytosis](#)
- [Pathways in cancer](#)
- [Thyroid cancer](#)

**Disease**

- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adrenal Gland Neoplasms](#)
- [Alzheimer Disease](#)
- [Atherosclerosis](#)
- [Carcinoma](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Digestive System Abnormalities](#)
- [Disease Progression](#)
- [Down Syndrome](#)
- [Endocrine Gland Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Glomus Tumor](#)
- [Hashimoto Disease](#)

- [Head and Neck Neoplasms](#)
- [Hippel-Lindau Disease](#)
- [Hirschsprung Disease](#)
- [Hydronephrosis](#)
- [Hyperplasia](#)
- [Hypertension](#)
- [Intestinal Diseases](#)
- [Kidney Diseases](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Macular Degeneration](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 2a](#)
- [Multiple Endocrine Neoplasia Type 2b](#)
- [Necrosis](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neurofibromatosis](#)
- [Nondisjunction](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Paranganglioma](#)
- [Parkinson disease](#)
- [Pheochromocytoma](#)
- [Prostate cancer](#)

- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Schizophrenia](#)
- [Sleep Apnea](#)
- [Sudden Infant Death](#)
- [Syndrome](#)
- [Taste](#)
- [Thyroid Diseases](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Urea Cycle Disorders](#)
- [Urinary Bladder Neoplasms](#)
- [Urogenital Abnormalities](#)
- [Vesico-Ureteral Reflux](#)
- [Vitamin A Deficiency](#)
- [von Hippel-Lindau Disease](#)
- [Von Hippel-Lindau syndrome](#)
- [Werner syndrome](#)