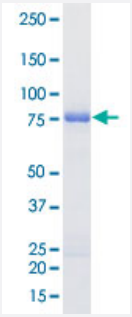
Bioactive

RET (S891A) (Human) Recombinant Protein

Catalog # P5632 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

Specification

Product Description	Human RET (NP_066124.1, 658 a.a. - 1114 a.a.) S891A mutant partial recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	79
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	88 % 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 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — RET

Entrez GeneID	5979
Protein Accession#	NP_066124.1
Gene Name	RET
Gene Alias	CDHF12, HSCR1, MEN2A, MEN2B, MTC1, PTC, RET-ELE1, RET51
Gene Description	ret proto-oncogene
Omim ID	142623 155240 162300 164761 171300 171400 209880
Gene Ontology	Hyperlink
Gene Summary	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
- Paraganglioma
- 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