

Recombinant Human RET Kinase Protein (aa 658-1114, His & GST Tag)

Catalog No. PKSH030342

Note: Centrifuge before opening to ensure complete recovery of vial contents.

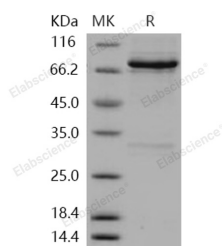
Description

Synonyms	CDHF12;CDHR16;HSCR1;MEN2A;MEN2B;MTC1;PTC;RET-ELE1;RET51
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	His 658-Ser 1114
Accession	P07949-1
Calculated Molecular Weight	76.7 kDa
Observed molecular weight	70 kDa
Tag	N-His-GST
Bioactivity	The specific activity was determined to be 17 nmol/min/mg using synthetic TRK-C-derived Peptide (R11-VYSTDYYRLFNPS) as substrate.

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
Formulation	Supplied as sterile solution of 20mM Tris, 500mM NaCl, 10% glycerol, pH 8.0
Reconstitution	Not Applicable

Data



> 90 % as determined by reducing SDS-PAGE.

Background

RET proto-oncogene, also known as RET, is a cell-surface molecule that transduce signals for cell growth and differentiation. It contains 1 cadherin domain and 1 protein kinase domain. RET proto-oncogene belongs to the protein kinase superfamily, tyr protein kinase family. RET proto-oncogene is involved in numerous cellular mechanisms including cell proliferation, neuronal navigation, cell migration, and cell differentiation upon binding with glial cell derived neurotrophic factor family ligands. It phosphorylates PTK2/FAK1 and regulates both cell death/survival balance

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and positional information. RET is required for the molecular mechanisms orchestration during intestine organogenesis, involved in the development of enteric nervous system and renal organogenesis during embryonic life, promotes the formation of Peyer's patch-like structures, modulates cell adhesion via its cleavage, involved in the development of the neural crest. RET proto-oncogene is active in the absence of ligand, triggering apoptosis. RET acts as a dependence receptor, in the presence of the ligand GDNF in somatotrophs (within pituitary), promotes survival and down regulates growth hormone (GH) production, but triggers apoptosis in absence of GDNF. It also regulates nociceptor survival and size, triggers the differentiation of rapidly adapting (RA) mechanoreceptors, mediated several diseases such as neuroendocrine cancers.