

Recombinant Human RET Kinase Protein (His Tag)

Catalog No. PKSH030937

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

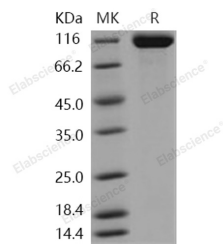
Description

Synonyms	CDHF12;CDHR16;HSCR1;MEN2A;MEN2B;MTC1;PTC;RET-ELE1;RET51
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Arg 635
Accession	P07949-1
Calculated Molecular Weight	69.1 kDa
Observed molecular weight	110-120 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 92 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 92 % 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

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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 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.