

Active Recombinant Human Ret Proto-oncogene, His-tagged

Cat. No. RET-1928H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Ret Proto-oncogene with a C-terminal His tag was expressed in an insect cell line, <i>Sf 21</i> .
Species	Human
Source	Sf21 Cells
Description	The RET proto-oncogene encodes a receptor tyrosine kinase for members of the glial cell line-derived neurotrophic factor family of extracellular signalling molecules. RET loss of function mutations are associated with the development of Hirschsprung's disease, while gain of function mutations are associated with the development of various types of human cancer, including medullary thyroid carcinoma, multiple endocrine neoplasias type 2A and 2B, pheochromocytoma and parathyroid hyperplasia.
Purity	> 90%, as determined by SDS-PAGE and visualized by silver stain.
Molecular Mass	Based on N-terminal sequencing, mature recombinant human Ret starts at Leu 29 and has a calculated mass of 69 kDa. As a result of glycosylation, the recombinant monomeric protein migrates as an approximately 90 kDa protein in SDS-PAGE under reducing conditions.
Activity	Measured by its ability to bind the complex of Artemin-GFRα3 in a functional ELISA. Serial dilution of immobilized rhRet (100μL/well) was tested for binding with rmArtemin (10 ng/mL) in the presence of

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	rhGFRα3/Fc (2 µg/mL). The ED50 of the immobilized Ret in this assay is typically 2 - 6 µg/mL.
Endotoxin	< 2.0 EU per 1 µg of the enzyme as determined by the LAL method.
Format	Lyophilized from a 0.2 µm filtered solution in PBS containing 50 µg of bovine serum albumin per 1 µg of cytokine.
Storage	Lyophilized samples are stable for up to six months at -20°C to -70°C. Upon reconstitution, this cytokine, in the presence of a carrier protein, can be stored under sterile conditions at 2 - 8°C for one month or at -20°C to -70°C in a manual defrost freezer for three months without detectable loss of activity. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	RET ret proto-oncogene [Homo sapiens]
Synonyms	RET; ret proto-oncogene; RET transforming sequence; cadherin family member 12; cadherin-related family member 16; hydroxyaryl-protein kinase; proto-oncogene c-Ret; proto-oncogene tyrosine-protein kinase receptor Ret; receptor tyrosine kinase; ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease); PTC; MTC1; HSCR1; MEN2A; MEN2B; RET51; CDHF12; CDHR16; RET-ELE1; RET; EC 2.7.10.1
Gene ID	5979
mRNA Refseq	NM_020630
Protein Refseq	NP_065681

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

MIM	164761
UniProt ID	P07949
Chromosome Location	10q11
Pathway	Endocytosis; Pathways in cancer; Thyroid cancer
Function	ATP binding; calcium ion binding; nucleotide binding; protein binding; protein tyrosine kinase activity; transferase activity; transmembrane receptor protein tyrosine kinase activity
PDB rendering based on 2ivs.	