Recombinant Human Ret Proto-Oncogene, GST-tagged

Cat. No. RET-1850H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Ret (a.a. 658-end) with Nterminal GST tag expressed in an*Baculovirus infected Sf9 cell*expression system. MW= 77.5 kDa.
Species	Human
Source	Sf9 Cells
ProteinLength	658-end a.a.
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.[1] 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, phaeochromocytoma and parathyroid hyperplasia.
Application	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.
Specific Activity	40 U/ug. One unit is defined as the amount of enzyme that will transfer 1 pmol phosphate to Tyr substrate per minute at pH 7.4 and 30°C. Assay buffer: 50 mM HEPES, pH 7.4, 3 mM MgCl2, 3 mM MnCl2, 1 mM DTT, 3 uM Na-orthovanadate, 0.1 mM ATP, 30 ug/ml Poly (Glu:Tyr)4:1 substrate, and 2 ug/ml recombinant cMet.
Purity	>80% by SDS-PAGE.

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Formulated In	25 mM Tris-HCl, pH 8.0, 100 mM NaCl, 0.05% Tween-20, 50% glycerol, 10 mM reduced glutathione, and 3 mM DTT.
Stability	>6 months at -80°C.

GENE INFORMATION

Gene Name	RET ret proto-oncogene [Homo sapiens]
Synonyms	ret proto-oncogene; PTC; MTC1; HSCR1; MEN2A; MEN2B; RET51; CDHF12; CDHR16; RET-ELE1; RET; proto-oncogene tyrosine-protein kinase receptor Ret; proto-oncogene c-Ret; receptor tyrosine kinase; RET transforming sequence; cadherin family member 12; hydroxyaryl-protein kinase; cadherin-related family member 16; ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease); Hirschsprung disease 1; multiple endocrine neoplasia and medullary thyroid carcinoma 1; C-ret;EC 2.7.10.1
Gene ID	5979
mRNA Refseq	NM_020630.4
Protein Refseq	NP_065681.1
MIM	164761
UniProt ID	P07949
Chromosome Location	10q11.2
Pathway	Endocytosis; Pathways in cancer; Thyroid cancer

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Function	ATP binding; calcium ion binding; nucleotide binding; protein binding; protein tyrosine kinase activity; receptor activity; transferase activity; transmembrane receptor protein tyrosine kinase activity
PDB rendering based on 2ivs.	

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