

## PTC2 recombinant protein

PTC2 Mutant (PRKAR1A-RET), Active

|                              |                                                   |                                     |
|------------------------------|---------------------------------------------------|-------------------------------------|
| CATALOG #<br><b>AAA73110</b> | HOST<br><b>Sf9 insect cells using baculovirus</b> | APPLICATIONS<br><b>Western Blot</b> |
|------------------------------|---------------------------------------------------|-------------------------------------|

### PRODUCT SYNONYMS

PTC2; PTC2 Mutant (PRKAR1A-RET); Active; PTC2 recombinant protein

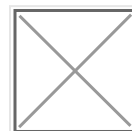
### PRODUCT SPECIFICATIONS

|                                                      |                                                                                                                                                                                                                                                      |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                                 | Sf9 insect cells using baculovirus                                                                                                                                                                                                                   |
| Form/Format                                          | 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.                                                                                                                                               |
| Sequence Positions                                   | PRKAR1A (1-236)-RET (713-end)                                                                                                                                                                                                                        |
| Sequence Length                                      | 4325                                                                                                                                                                                                                                                 |
| Applicable Applications for PTC2 recombinant protein | WB (Western Blot), Kinase Assay                                                                                                                                                                                                                      |
| Species                                              | Human                                                                                                                                                                                                                                                |
| Tag                                                  | GST tag                                                                                                                                                                                                                                              |
| Dry Ice Note                                         | The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.                                                                                                                                                   |
| Preparation and Storage                              | Store product at -70 degree C.<br>For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature.<br>For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. |

### IMAGES



Application Data



Application Data

### ADDITIONAL INFORMATION

|                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| Related Product Information for PTC2 recombinant protein | <p>Description: Recombinant human RET/PTC2, the fusion protein [PRKAR1A (1-236)-RET (713-end)], was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.</p> <p>Scientific Background: RET/PTC2 is fused of the tyrosine-kinase domain of proto-RET with the regulatory subunit R/A of c-AMP-dependent protein kinase A, by transforming a chromosomal translocation at t (10;17) (q11.2;q23) (1). The RET/PTC oncoproteins display constitutive TK activity and tyrosine phosphorylation. The RET/PTC2 Tyr-539 is an essential docking site for activating the SH2-containing transducer phospholipase PLCgamma (2). The RET/PTC2 activation may play crucial roles in papillary thyroid tumorigenesis and neoplastic oncogene.</p> |
| Product Categories/Family for PTC2 recombinant protein   | Enzymes; Active Kinase Mutants                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|            |                                                                                                                                                                                                                                                                                                                                                                       |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| References | 1. Gabriella S. et al: A t (10; 17) translocation creates the RET/PTC2 chimeric transforming sequence in papillary thyroid carcinoma. Genes, Chromosomes and Cancer. 9:244-250 (1994). 2. M G Borrello, et al: The full oncogenic activity of Ret/ptc2 depends on tyrosine 539, a docking site for phospholipase Cgamma. Mol Cell Biol. May 1996; 16 (5): 2151 -2163. |
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## NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                  |
|----------------------------------|------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 443497962                                                                                                        |
| NCBI GeneID                      | 5573                                                                                                             |
| NCBI Accession #                 | NM_002734.4                                                                                                      |
| NCBI GenBank Nucleotide #        | NM_002734                                                                                                        |
| UniProt Accession #              | P10644; Q567S7; K7ER48                                                                                           |
| Molecular Weight                 | ~105 kDa                                                                                                         |
| NCBI Official Full Name          | Homo sapiens protein kinase cAMP-dependent type I regulatory subunit alpha (PRKAR1A), transcript variant 1, mRNA |
| NCBI Official Synonym Full Names | protein kinase cAMP-dependent type I regulatory subunit alpha                                                    |
| NCBI Official Symbol             | PRKAR1A                                                                                                          |
| NCBI Official Synonym Symbols    | CAR; CNC; CNC1; PKR1; TSE1; ADOHR; PPNAD1; PRKAR1; ACRDYS1                                                       |
| NCBI Protein Information         | cAMP-dependent protein kinase type I-alpha regulatory subunit                                                    |
| UniProt Protein Name             | cAMP-dependent protein kinase type I-alpha regulatory subunit                                                    |
| UniProt Gene Name                | <b>PRKAR1A</b>                                                                                                   |
| UniProt Synonym Gene Names       | PKR1; PRKAR1; TSE1; TSE1                                                                                         |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/prkar1a-recombinant-protein-sf9-insect-cells-using-baculovirus-wb-western-blot-kinase-assay/73110>