

## Recombinant Human PRKAA2 protein, His/MBP-tagged

**Cat. No.** PRKAA2-362H    **Lot. No.** (See product label)

### SPECIFICATION

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| <b>Product Overview</b> | Recombinant Human PRKAA2(461-536 aa) fused with His/MBP tag was expressed in E. coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ProteinLength</b>    | 461-536 aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Description</b>      | <p>The protein encoded by this gene is a catalytic subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. Studies of the mouse counterpart suggest that this catalytic subunit may control whole-body insulin sensitivity and is necessary for maintaining myocardial energy homeostasis during ischemia.</p> |
| <b>Form</b>             | Liquid in PBS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Purity</b>           | SDS-PAGE >90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Applications</b>     | WB Positive Control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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| <b>Stability</b>        | Samples are stable for up to twelve months from date of receipt at -70°C.                                                                                                                                                                                  |
| <b>Storage</b>          | Store it under sterile conditions at -20°C~-70°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.                                                                                                  |
| <b>GENE INFORMATION</b> |                                                                                                                                                                                                                                                            |
| <b>Gene Name</b>        | PRKAA2 protein kinase, AMP-activated, alpha 2 catalytic subunit [ Homo sapiens ]                                                                                                                                                                           |
| <b>Official Symbol</b>  | PRKAA2                                                                                                                                                                                                                                                     |
| <b>Synonyms</b>         | PRKAA2; protein kinase, AMP-activated, alpha 2 catalytic subunit; PRKAA; 5-AMP-activated protein kinase catalytic subunit alpha-2; AMPK; AMPKa2; AMPK-alpha-2 chain; AMPK subunit alpha-2; 5-AMP-activated protein kinase, catalytic alpha-2 chain; AMPK2; |
| <b>Gene ID</b>          | 5563                                                                                                                                                                                                                                                       |
| <b>mRNA Refseq</b>      | NM_006252                                                                                                                                                                                                                                                  |
| <b>Protein Refseq</b>   | NP_006243                                                                                                                                                                                                                                                  |
| <b>MIM</b>              | 600497                                                                                                                                                                                                                                                     |
| <b>UniProt ID</b>       | P54646                                                                                                                                                                                                                                                     |