PRKAA1, 1-279aa, Human, His tag, E.coli

Cat.NO.: TP03519

3th Edition

Synonyms:5-AMP-activated protein kinase catalytic subunit alpha-1 isoform 1, AMPK, AMPKa11

Description:PRKAA1 also known as 5-AMP-activated protein kinase catalytic subunit alpha-1 isoform 1. PRKAA1 is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinasen activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Recombinant human PRKAA1 protein, fused to His-tag at N-terminus, was expressed in E.coli.

Form: Liquid, In 20mM Tris-HCl buffer(pH8.0) containing 10% glycerol

Molecular Weight:34.3kDa (302aa)

Sequences:
MGSSHHHHHHSSGLVPRGSHMGSMRRLSSWRKMATAEKQKHDGRVKIGHYILGDTLGVGTFGKVKVGKHELTG
HKVAVKILNRQKIRSLDVVGKIRREIQNLKLFRHPHIIKLYQVISTPSDIFMVMEYVSGGELFDYICKNGRLDEKESRRL
FQQILSGVDYCHRHMVVHRDLKPENVLLDAHMNAKIADFGLSNMMSDGEFLRTSCGSPNYAAPEVISGRLYAGPE
VDIWSSGVILYALLCGTLPFDDDHVPTLFKKICDGIFYTPQYLNPSVISLLKHMLQVDPMKRATIKDIREHEWF

Purity:> 95% by HPLC

Concentration:1mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.