



Product Datasheet

Product Name	cAMP-Dependent Protein Kinase A regulatory subunit I a
Cata No	CB500808
Source	<i>Escherichia Coli.</i>
Synonyms	cAMP-dependent protein kinase type I-alpha regulatory subunit, Tissue-specific extinguisher 1, TSE1, CAR, CNC, CNC1, PKR1, PPNAD1, PRKAR1, PRKAR1A, MGC17251, DKFZp779L0468.

Description

cAMP-dependent PKA is an ubiquitous serine/threonine protein kinase present in a variety of tissues (e.g. brain, skeletal muscle, heart). The intracellular cAMP level regulates cellular responses by altering the interaction between the catalytic C and regulatory R subunits of PKA. The inactive tetrameric PKA holoenzyme R2C2 is activated when cAMP binds to R2, which dissociates the tetramer to R2 cAMP 4 and two active catalytic subunits. Free Catalytic subunits of PKA can phosphorylate a wide variety of intracellular target proteins. In response to hormone- induced high cAMP levels, PKA

phosphorylates glycogen synthetase (inhibition of the enzyme activity) and phosphorylase kinase to block glycogen synthesis. Different isoforms of catalytic and regulatory subunits suggest specific functions. The recombinant PKA regulatory subunit I a is a dimeric 90kDa protein.

Purity

Greater than 90% as determined by SDS-PAGE.

Formulation

PKA regulatory subunit I a is supplied in 50% glycerol.