Protein Kinase A I beta, Regulatory Subunit (Protein Kinase A RI beta Subunit)

Catalog number

P9102-90M

Supplier

United States Biological

The cAMP-dependent protein kinase (PKA) is a critical kinase involved in numerous biological functions. The PKA holoenzyme is composed of two regulatory and two catalytic subunits, designated PKA R and PKA C, respectively. For PKA C, three catalytic subunit isoforms, Cα, Cβ, and Cγ, have been identified. On the other hand, PKA regulatory (PKA R) subunits existing as two classes, RI and RII, with each class containing two isoforms, α and β are found in different levels in tissue–specific manner. They allow a range of modifying agents to influence PKA activity and localization. Upon the binding of PKA R subunit with secondary messenger cAMP, active PKA C subunits are released, initiating a phosphorylation cascade that regulates many cellular functions including metabolism, ion transport, and gene transcription.

Applications

Suitable for use in ELISA and Western Blot. Other applications not tested.

Recommended Dilution

ELISA: 0.05-0.2ug/ml
Western Blot: 0.5-2ug/ml
Optimal dilutions to be determined by the researcher.

Storage and Stability

Lyophilized powder may be stored at -20°C. Reconstitute with sterile 40-50% glycerol, aliquot and store at -20°C. Reconstituted product is stable for 12 months at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

Immunogen

Synthetic peptide (KLH). derived from human PKA regulatory Iβ subunit (PKA RIβ).

Formulation

Supplied as a lyophilized powder in PBS, pH 7.4, 0.02% sodium azide.

Purity

Purified by immunoaffinity chromatography.

Specificity

Recognizes endogenous human PKA regulatory subunit RIβ (PKA RIβ) protein.

Product Type

Pab

Source

human

Isotype

IgG

Grade

Affinity Purified

Applications

E WB

Crossreactivity

Hu

Storage

-20°C