

Protein Kinase A regulatory subunit I beta Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP7051a**Specification****Protein Kinase A regulatory subunit I beta Antibody (N-term) Blocking peptide - Product Information**Primary Accession [P31321](#)**Protein Kinase A regulatory subunit I beta Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 5575**Other Names**

cAMP-dependent protein kinase type I-beta regulatory subunit, PRKAR1B

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7051a](#) was selected from the N-term region of human PRKAR1B . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Protein Kinase A regulatory subunit I beta Antibody (N-term) Blocking peptide - Protein Information**Name** PRKAR1B**Protein Kinase A regulatory subunit I beta Antibody (N-term) Blocking peptide - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the γ phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

Protein Kinase A regulatory subunit I beta Antibody (N-term) Blocking peptide - References

Solberg, R., et al., Exp. Cell Res. 214(2):595-605 (1994). Solberg, R., et al., Biochem. Biophys. Res. Commun. 176(1):166-172 (1991).

Function

Regulatory subunit of the cAMP-dependent protein kinases involved in cAMP signaling in cells.

Cellular Location

Cell membrane.

Tissue Location

Four types of regulatory chains are found: I-alpha, I-beta, II-alpha, and II-beta. Their expression varies among tissues and is in some cases constitutive and in others inducible

**Protein Kinase A regulatory subunit I beta
Antibody (N-term) Blocking peptide -
Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)