

Epstein-Barr TK Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP8100b**Specification**

Epstein-Barr TK Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P03177](#)**Epstein-Barr TK Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 3783741**Other Names**

Thymidine kinase, TK

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8100b](/product/products/AP8100b) was selected from the C-term region of human TK. 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.

Epstein-Barr TK Antibody (C-term) Blocking Peptide - Protein Information**Name** TK {ECO:0000255|HAMAP-Rule:MF_04029}**Function**

Catalyzes the transfer of the gamma-phospho group of ATP to thymidine to generate dTMP in the salvage pathway of pyrimidine synthesis. The dTMP serves as a substrate for DNA polymerase during viral DNA replication. Allows the virus to be reactivated and to grow in non-proliferative cells lacking a high concentration of phosphorylated nucleic acid precursors.

Cellular Location

Virion tegument. Host nucleus. Note=Localizes to the centrosome and more precisely to the periphery of the centriole, tightly encircling the tubulin-rich centrioles

Epstein-Barr TK Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Epstein-Barr TK Antibody (C-term) Blocking Peptide - Images

Epstein-Barr TK Antibody (C-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.

Epstein-Barr TK Antibody (C-term) Blocking Peptide - References

Littler, E., et al., EMBO J. 5(8):1959-1966 (1986). Bankier, A.T., et al., Mol. Biol. Med. 1(1):21-45 (1983).