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DTYMK Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7060a

Specification

DTYMK Antibody (N-term) Blocking Peptide - Product Information

Primary Accession	P23919
Other Accession	NP_036277

DTYMK Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 1841

Other Names
Thymidylate kinase, dTMP kinase, DTYMK, CDC8, TMPK, TYMK

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7060a was selected from the N-term region of human DTYMK. 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.

DTYMK Antibody (N-term) Blocking Peptide - Protein Information

Name DTYMK

Synonyms CDC8, TMPK, TYMK

Function
Catalyzes the phosphorylation of thymidine monophosphate (dTMP) to thymidine diphosphate (dTDP), the immediate precursor for the DNA building block dTTP, with ATP as the preferred phosphoryl donor in the presence of Mg(2+).

DTYMK Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

DTYMK Antibody (N-term) Blocking Peptide - Images

DTYMK Antibody (N-term) Blocking Peptide - Background

Thymidylate kinase (DTYMK) catalyzes the phosphorylation of dTMP to form dTDP in the dTTP synthesis pathway for DNA synthesis. DTYMK is essential for DNA synthesis and is an important intermediate enzyme in the pathway of many pyrimidine analog drugs, including 5-Fluorouracil (5-FU), the chemotherapeutic drug of choice for several solid tumors. The human DTYMK gene was isolated via functional complementation of a Saccharomyces cerevisiae cell cycle mutant, cdc8. DTYMK mRNA levels and enzyme activities are regulated at the level of cell cycle and cell growth pathways.

DTYMK Antibody (N-term) Blocking Peptide - References

Huang, S.H., et al., DNA Cell Biol. 13(5):461-471 (1994).Su, J.Y., et al., Nucleic Acids Res. 19(4):823-827 (1991).Tamiya, N., et al., Biochim. Biophys. Acta 995(1):28-35 (1989).Cummins, R.R., et al., Cancer Res. 40(4):1235-1239 (1980).Van Rompay, A.R., et al., Pharmacol. Ther. 87 (2-3), 189-198 (2000).