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DCTD Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP16651a

Specification

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

Primary Accession P32321

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

Gene ID 1635

Other Names
Deoxycytidylate deaminase, dCMP deaminase, DCTD

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.

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

Name DCTD (HGNC:2710)

Function
Catalyzes the deamination of dCMP to dUMP, providing the nucleoside monophosphate substrate for the thymidylate synthase/TYMS (PubMed:7685356). Also, part of a nucleotide salvage pathway that eliminates epigenetically modified 5-hydroxymethyl-dCMP (hmdCMP) in a two-step process entailing deamination to cytotoxic 5-hydroxymethyl- dUMP (hmdUMP), followed by its hydrolysis into 5-hydroxymethyluracil (hmU) and 2-deoxy-D-ribose 5-phosphate (deoxyribosephosphate) (PubMed:33833118). Catalyzes the first step in that pathway, the deamination of 5-hydroxymethyl-dCMP (hmdCMP) (PubMed:33833118).

DCTD Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

DCTD Antibody (N-term) Blocking Peptide - Images

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DCTD Antibody (N-term) Blocking Peptide - Background

The protein encoded by this gene catalyzes the deaminationof dCMP to dUMP, the nucleotide substrate for thymidylate synthase.The encoded protein is allosterically activated by dCTP andinhibited by dTTP, and is found as a homohexamer. This protein useszinc as a cofactor for its activity. Two transcript variantsencoding different isoforms have been found for this gene.

DCTD Antibody (N-term) Blocking Peptide - References

Tanaka, M., et al. Cancer (2010) In press :Okazaki, T., et al. Clin. Cancer Res. 16(1):320-329(2010)Rha, S.Y., et al. Oncologist 12(6):622-630(2007)Rush, J., et al. Nat. Biotechnol. 23(1):94-101(2005)Rush, J., et al. Nat. Biotechnol. 23(1):94-101(2005)