

DCTD Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP16651a**Specification**

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

DCTD Antibody (N-term) Blocking Peptide - Background

The protein encoded by this gene catalyzes the deamination of dCMP to dUMP, the nucleotide substrate for thymidylate synthase. The encoded protein is allosterically activated by dCTP and inhibited by dTTP, and is found as a homohexamer. This protein uses zinc as a cofactor for its activity. Two transcript variants encoding 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)