

DCTD Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16651A

Specification

DCTD Antibody (N-term) - Product Information

Application WB,E
Primary Accession P32321

Other Accession Q5M9G0, Q8K2D6, NP_001912.2

Reactivity
Predicted
Mouse, Rat
Host
Clonality
Polyclonal
Isotype
Rabbit IgG
Calculated MW
Antigen Region
Antigen Region
Antigen Region
Antigen Region
Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
1-30

DCTD Antibody (N-term) - Additional Information

Gene ID 1635

Other Names

Deoxycytidylate deaminase, dCMP deaminase, DCTD

Target/Specificity

This DCTD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human DCTD.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DCTD Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

DCTD Antibody (N-term) - Protein Information

Name DCTD (HGNC:2710)



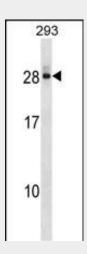
Function Catalyzes the deamination of dCMP to dUMP, providing the nucleoside monophosphate substrate for the thymidylate synthase/TYMS (PubMed:<u>7685356</u>). Also, part of a nucleotide salvage pathway that eliminates epigenetically modified 5-hydroxymethyl-dCMP (hmdCMP) in a two-step process entailing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

DCTD Antibody (N-term) - Protocols

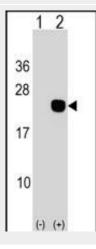
Provided below are standard protocols that you may find useful for product applications.

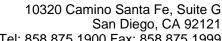
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

DCTD Antibody (N-term) - Images



DCTD Antibody (N-term) (Cat. #AP16651a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the DCTD antibody detected the DCTD protein (arrow).







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Western blot analysis of DCTD (arrow) using rabbit polyclonal DCTD Antibody (N-term) (Cat. #AP16651a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the DCTD gene.

DCTD Antibody (N-term) - 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) - 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)