

**DCTD Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP16651A****Specification**

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**DCTD Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P32321</a>
Other Accession	<a href="#">Q5M9G0</a> , <a href="#">Q8K2D6</a> , <a href="#">NP_001912.2</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	20016
Antigen Region	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

**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

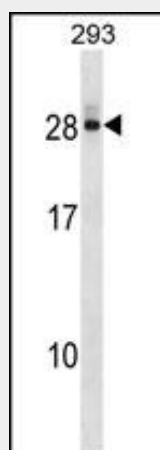
substrate for the thymidylate synthase/TYMS (PubMed:[7685356](#)). Also, part of a nucleotide salvage pathway that eliminates epigenetically modified 5-hydroxymethyl-dCMP (hmdCMP) in a two-step process entailing deamination to cytotoxic 5-hydroxymethyl- dUMP (hmdUMP), followed by its hydrolysis into 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) - Protocols

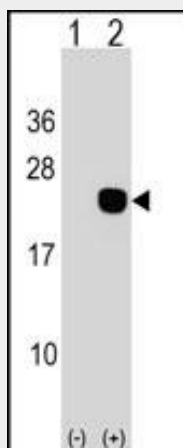
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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).



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)  
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