

**Anti-Cyclin T1 Picoband Antibody**  
**Catalog # ABO12675****Specification**

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**Anti-Cyclin T1 Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">O60563</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Cyclin-T1(CCNT1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Cyclin T1 Picoband Antibody - Additional Information**

**Gene ID** 904

**Other Names**

Cyclin-T1, CycT1, Cyclin-T, CCNT1

**Calculated MW**

80685 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br> <br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Nucleus .

**Tissue Specificity**

Ubiquitously expressed.

**Protein Name**

Cyclin-T1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human Cyclin T1 (375-410aa QKQNSKSVPSAKVSLKEYRAKHAEELAAQKRQLENM), different from the related mouse sequence by one amino acid.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-Cyclin T1 Picoband Antibody - Protein Information**

**Name** CCNT1

**Function**

Regulatory subunit of the cyclin-dependent kinase pair (CDK9/cyclin-T1) complex, also called positive transcription elongation factor B (P-TEFb), which facilitates the transition from abortive to productive elongation by phosphorylating the CTD (C-terminal domain) of the large subunit of RNA polymerase II (RNA Pol II) (PubMed: [16109376](http://www.uniprot.org/citations/16109376), PubMed: [16109377](http://www.uniprot.org/citations/16109377), PubMed: [30134174](http://www.uniprot.org/citations/30134174), PubMed: [35393539](http://www.uniprot.org/citations/35393539)). Required to activate the protein kinase activity of CDK9: acts by mediating formation of liquid-liquid phase separation (LLPS) that enhances binding of P-TEFb to the CTD of RNA Pol II (PubMed: [29849146](http://www.uniprot.org/citations/29849146), PubMed: [35393539](http://www.uniprot.org/citations/35393539)).

**Cellular Location**

Nucleus

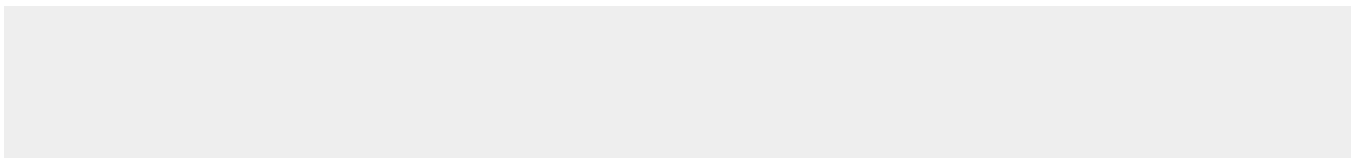
**Tissue Location**

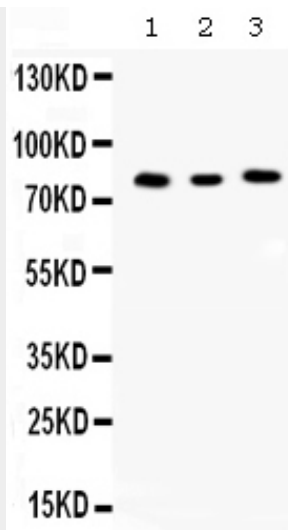
Ubiquitously expressed.

**Anti-Cyclin T1 Picoband Antibody - Protocols**

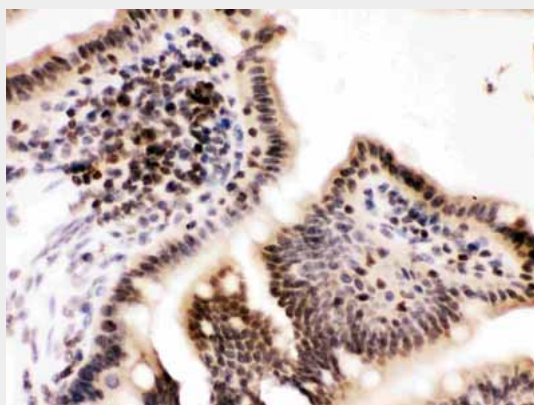
Provided below are standard protocols that you may find useful for product applications.

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

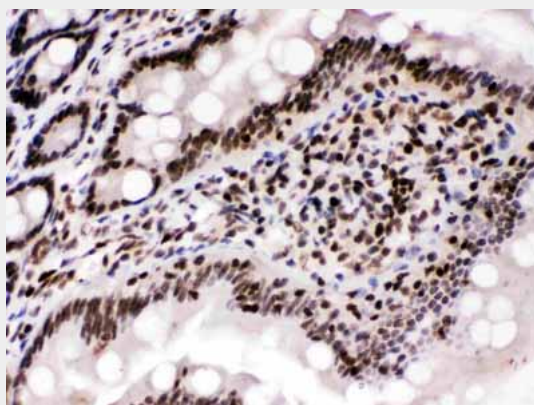
**Anti-Cyclin T1 Picoband Antibody - Images**



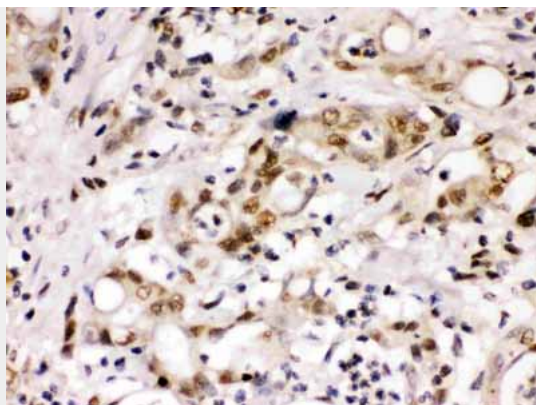
Western blot analysis of Cyclin T1 expression in rat kidney extract (lane 1), mouse spleen extract (lane 2) and JURKAT whole cell lysates (lane 3). Cyclin T1 at 81KD was detected using rabbit anti-Cyclin T1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12675) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .



Cyclin T1 was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti- Cyclin T1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12675) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .



Cyclin T1 was detected in paraffin-embedded sections of rat intestine tissues using rabbit anti-Cyclin T1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12675) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .



Cyclin T1 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- Cyclin T1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12675) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .

#### **Anti-Cyclin T1 Picoband Antibody - Background**

Cyclin-T1 is a protein that in humans is encoded by the CCNT1 gene. This gene encodes a member of the highly conserved cyclin C subfamily. The encoded protein tightly associates with cyclin-dependent kinase 9, and is a major subunit of positive transcription elongation factor b (p-TEFb). In humans, there are multiple forms of positive transcription elongation factor b, which may include one of several different cyclins along with cyclin-dependent kinase 9. The complex containing the encoded cyclin and cyclin-dependent kinase 9 acts as a cofactor of human immunodeficiency virus type 1 (HIV-1) Tat protein, and is both necessary and sufficient for full activation of viral transcription. This cyclin and its kinase partner are also involved in triggering transcript elongation through phosphorylation of the carboxy-terminal domain of the largest RNA polymerase II subunit. Overexpression of this gene is implicated in tumor growth. Alternative splicing results in multiple transcript variants.