10320 Camino Santa Fe, Suite G
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Anti-Cyclin T1 Picoband Antibody

Catalog # ABO12675

Specification

Anti-Cyclin T1 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	O60563
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

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Nucleus .

Tissue Specificity
Ubiquitously expressed.

Protein Name
Cyclin-T1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

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 r˚Constitution, 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, PubMed:16109377, PubMed:30134174, PubMed: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, PubMed: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 Cytomety
- Cell Culture

Anti-Cyclin T1 Picoband Antibody - Images

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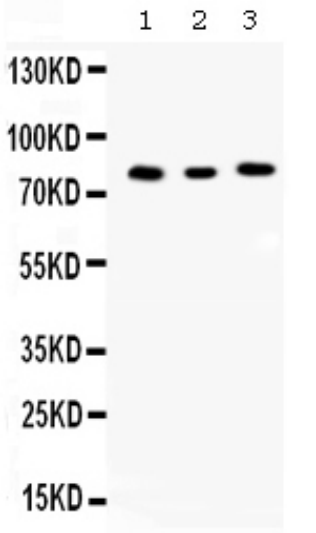
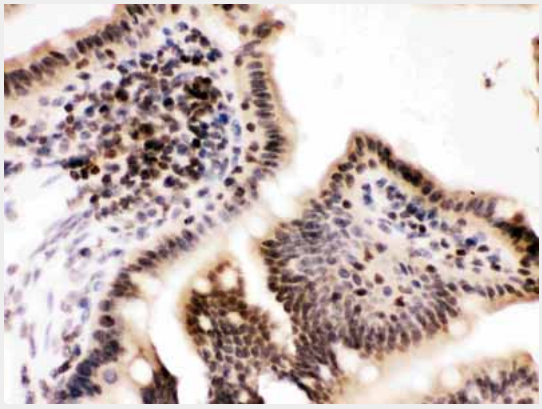
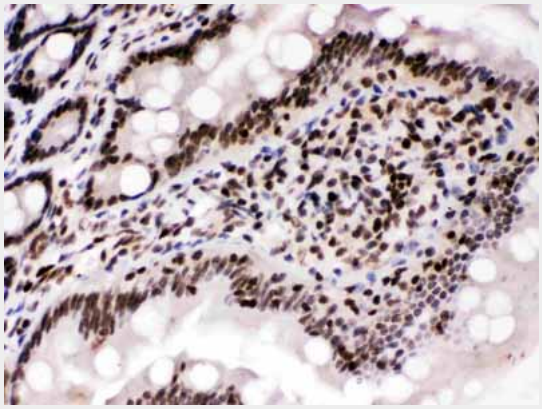


Western blot analysis of Cyclin T1 expression in rat kidney extract (lane 1), mouse spleen extract (lane 2) and JURKAT whole cell lysates (lane 3). Cyclin T1 at 81KD was detected using rabbit anti-Cyclin T1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12675) at 0.5 Î¼g/mL. The blot was 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 ??g/mL. The immunohistochemical section was developed using SABC method .



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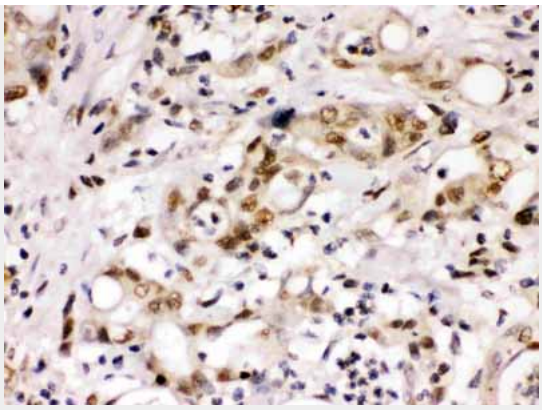

Cyclin T1 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- Cyclin T1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12675) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

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.