10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Cyclin T1 Picoband Antibody

Catalog # ABO12675

Product Information

Application	WB, IHC-P
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.

Additional Information

Gene ID	904
Other Names	Cyclin-T1, CycT1, Cyclin-T, CCNT1
Calculated MW	80685
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Nucleus .
Tissue Specificity	Ubiquitously expressed.
Source	Eukaryota
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.

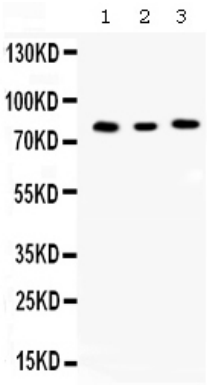
Protein Information

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.

Background

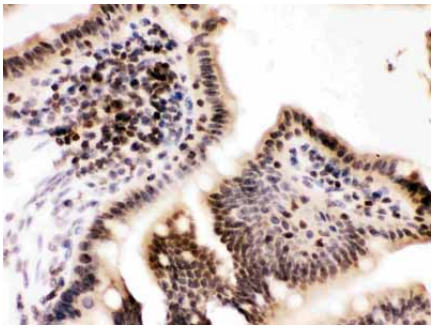
Cyclin-T1 is a protein that in humans is encoded by the CCNT1 gene. This gene encodes a member of the highly conserved cyclin C subfamily. The encoded protein tightly associates with cyclin-dependent kinase 9, and is a major subunit of positive transcription elongation factor b (p-TEFb). In humans, there 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.

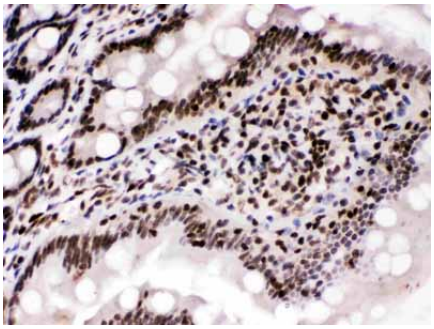
Images



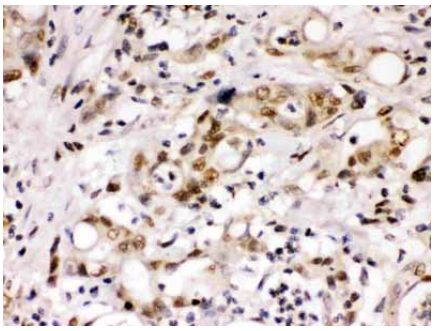
Western blot analysis of Cyclin T1 expression in rat kidney extract (lane 1), mouse spleen extract (lane 2) and JURKAT whole cell lysates (lane 3). Cyclin T1 at 81KD was detected using rabbit anti- Cyclin T1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12675) at 0.5 □¼g/mL. The blot was 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 .





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 □¼g/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 □¼g/mL. The immunohistochemical section was developed using SABC method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.