

Anti-Cyclin T1 (RABBIT) Antibody - 100-401-158

Code: 100-401-158

Size: 100 µL

Product Description: Anti-Cyclin T1 (RABBIT) Antibody - 100-401-158

Concentration: 75 mg/mL by Refractometry

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	CCNT1
Species Reactivity	human, mouse, rat
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	rabbit anti-cyclin T1 antibody, CYCT 1 antibody, cycT1 antibody, HIV1 antibody, Human immunodeficiency virus 1 expression antibody
Application Note	Suitable for ELISA, immunoprecipitation, immunohistochemistry, immunoblotting and other immunological methods requiring high titer and specificity. Anti-Cyclin T1 is suitable for the detection by immunoblot of human, rat and mouse Cyclin T1. Use paraffin embedded tissue for immunohistochemistry. HeLa cells may be used as a positive control.
Background	Cyclin T1, together with the kinase CDK9, is a component of the transcription elongation factor P-TEFb which binds the human immunodeficiency virus type 1 (HIV-1) transactivator Tat. Tat stimulates human HIV-1 viral transcription elongation. This suggests that cyclin T1/cdk9(PITALRE) is one of the HIV-1 required host cellular cofactors generated during T cell activation. Cyclin T1/cdk9(PITALRE) is shown to interact with Tat to restore Tat activation in HeLa nuclear extracts depleted of P-TEFb. P-TEFb facilitates transcription by phosphorylating the carboxy-terminal domain (CTD) of RNA polymerase II. The cdk9(PITALRE) activity and cyclin T1 are essential for activation of transcription when tethered to the heterologous Rev response element RNA via the regulator of expression of virion Rev. Cyclin T1 is an exceptionally large cyclin and is therefore a candidate for interactions with regulatory proteins.
Purity And Specificity	This product was prepared from monospecific antiserum by delipidation and defibrination. Antiserum will specifically react with an 85 kDa cyclin T1 protein from human, rat and mouse tissue. No reaction was observed against other related cyclins. Cross reactivity with cyclin T1 from other species may also occur.
Assay Dilutions	User Optimized
ELISA	1:1,000 - 1:5,000
Western Blot	1:500 - 1:2,000
Immunohistochemistry	1:200 - 1:1,000
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	Cyclin T1 peptide corresponding to an internal region of the human protein conjugated to Keyhole Limpet Hemocyanin (KLH).
General Reference	Bagella, L., MacLachlan, T.K., Buono, R.J., Pisano, M.M., Giordano, A. and De Luca, A. (1998) Cloning of murine cdk9/PITALRE and its tissue-specific expression in development. <i>J. Cell Physiol.</i> 177(2):206-13. MacLachlan, T.K., Sang, N., De Luca, A., Puri, P.L., Levrero, M. and Giordano, A. and (1998) Binding of cdk9 to TRAF2. <i>J. Cell Biochem.</i> 71(4):467-478. Peng, J., Zhu, Y., Milton, J.T. and Price, D.H. (1998). Identification of multiple cyclin subunits of human P-TEFb. <i>Genes Dev.</i> 12(5):755-762. De Falco, G. and Giordano, A. (1998) CDK(PITALRE): A Multifunctional cdc-2-related Kinase. <i>J. Cell. Physiol.</i> 177; 501-506. Fujinaga, K., Cujec, T.P., Peng, J., Garriga, J., Price, D.H., Graña, X. and Peterlin, B.M. (1998) The ability of positive transcription elongation factor B to transactivate human immunodeficiency virus transcription depends on a functional kinase domain, cyclin T1 and Tat. <i>J. Virol.</i> 72(9) 7154-7159.

Related Products

100-401-167	Anti-cdk9 (PITALRE) (RABBIT) Antibody - 100-401-167
100-401-218	Anti-Erk2 (RABBIT) Antibody - 100-401-218
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302
611-143-002	Anti-RABBIT IgG (H&L) (GOAT) Antibody DyLight™ 649 Conjugated - 611-143-002

Related Links

NCBI - NP_001231.2

http://www.ncbi.nlm.nih.gov/protein/NP_001231.2

UniProtKB - O60563

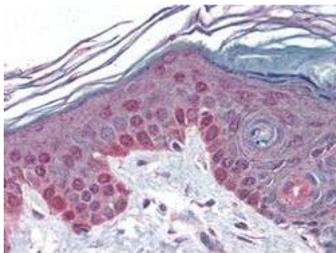
<http://www.uniprot.org/uniprot/O60563>

GeneID - 904

Images

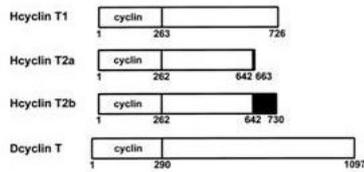
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Rockland's Anti-Cyclin T1 antibody was diluted 1:500 to detect Cyclin T1 in human skin tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.



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Diagram of human cyclins T1, T2a, and T2b and Drosophila cyclin T. Amino acids are numbered on the bottom of each protein. The cyclin box is indicated. Human cyclins T2a and T2b have 642 amino acids in common but different carboxyl termini (black boxes).



Disclaimer

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