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Datasheet for 100-401-158

Cyclin T1 Antibody

Overview

Description:	Anti-Cyclin T1 (RABBIT) Antibody - 100-401-158
Item No.:	100-401-158
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

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.
Synonyms:	rabbit anti-cyclin T1 antibody, CYCT 1 antibody, cycT1 antibody, HIVE1 antibody, Human immunodeficiency virus 1 expression antibody, CCNT1 Antibody, CCNT, CYCT1, HIVE1, Cyclin-T1, CycT1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	CCNT1
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Cyclin T1 peptide corresponding to an internal region of the human protein conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/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.
Relevant Links:	• NCBI - NP_001231.2 • UniProtKB - O60563 • GeneID - 904

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Cyclin T1 has been tested in western blot and immunohistochemistry. This antibody is suitable for ELISA, immunoprecipitation, 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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:1,000 - 1:5,000
IHC:	1:200 - 1:1,000
IP:	1:100
WB:	1:500 - 1:2,000

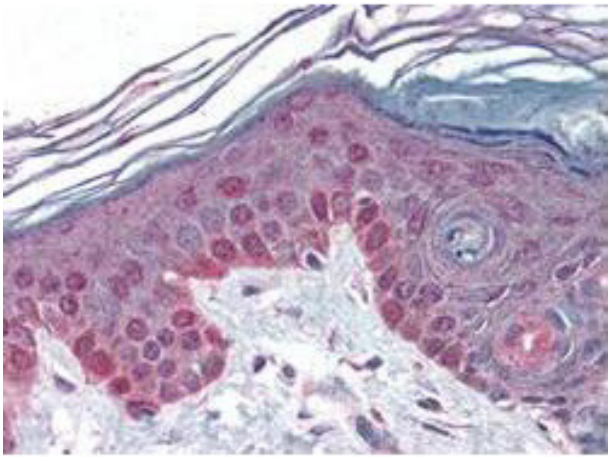
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	75 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry
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.

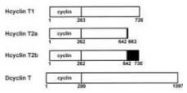


Diagram
Diagram of human cyclins T1, T2a, and T2b and Drosophila cyclin T. Amino acids are numbered on the bottom of each protein. The cyclin box is indicated. Human cyclins T2a and T2b have 642 amino acids in common but different carboxyl termini (black boxes).

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Disclaimer

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