

Product datasheet for TA319405

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Cyclin T1 (CCNT1) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IHC

Recommended Dilution: ELISA: 1:1,000 - 1:5,000, WB: 1:500 - 1:2,000, IHC: 1:200 - 1:1,000, IP: 1:100

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: Cyclin T1 peptide corresponding to an internal region of the human protein conjugated to

Keyhole Limpet Hemocyanin (KLH).

Formulation: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Concentration: lot specific

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: cyclin T1

Database Link: NP 001231

Entrez Gene 12455 MouseEntrez Gene 315291 RatEntrez Gene 904 Human

<u>060563</u>

Synonyms: CCNT; CYCT1; HIVE1





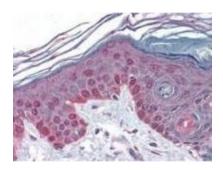
Note:

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.

Protein Families:

Druggable Genome, Transcription Factors

Product images:



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).