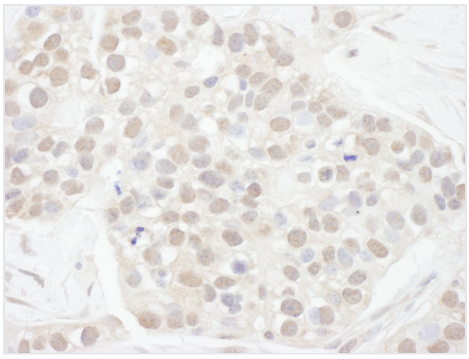
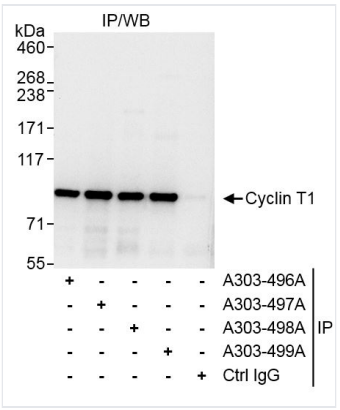
Cyclin T1 (CCNT1) Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

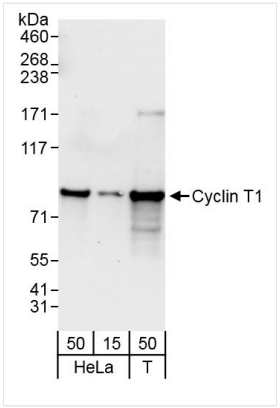
Product Name	Cyclin T1 (CCNT1), Polyclonal Antibody
Full Product Name	Rabbit anti-Cyclin T1 Antibody, Affinity Purified
Product Gene Name	anti-CCNT1 antibody
Product Synonym Names	CYCT1; cyclin-T1; HIVE1; MLLT10/CCNT1 fusion; cyclin C-related protein; CDK9-associated C-type protein; CCNT; human immunodeficiency virus type 1 (HIV-1) expression (elevated) 1; Cyclin-T; Cyclin-T1; cyclin T1
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid. Whole IgG. Tris-buffered Saline containing 0.1% BSA and 0.09% Sodium Azide
Purity/Purification	Antigen Affinity Purified
Concentration	200ug/ml (lot specific)
Preparation and Storage	Store at 2-8 degree C Shelf Life: 1 year from date of receipt
Molecular Weight	21,206 Da
OMIM	143055
3D Structure	ModBase 3D Structure for O60563
Predicted Reactivity	Bovine, Horse, Chimpanzee
Immunogen	Between 425 and 475
Conjugation	Unconjugated
Product Categories/Family for anti-CCNT1 antibody	Primary Antibodies
Applications Tested/Suitable for anti-CCNT1 antibody	Western Blot (WB), Immunoprecipitation (IP), Immunohistochemistry (IHC)
Application Notes for anti-CCNT1 antibody	WB: 1:2000-1:10,000 IP: 6ug/mg lysate IHC: 1:100-1:500. Epitope retrieval with citrate buffer pH 6.0 is recommended for FFPE tissue sections.
Related Product Information for anti-CCNT1 antibody	Cyclin T1 is a regulatory subunit of the cyclin-dependent kinase pair (CDK9/cyclin-T1) complex, also called positive transcription elongation factor B (P-TEFb), which is proposed to facilitate the transition from abortive to productive elongation by phosphorylating the CTD (carboxy-terminal domain) of the large subunit of RNA polymerase II (RNA Pol II). In case of HIV or SIV infections, Cyclin T1 binds to the transactivation domain of the viral nuclear transcriptional activator, Tat, thereby increasing Tat's affinity for the transactivating response RNA element (TAR RNA) [taken from the Universal Protein Resource (UniProt) www.uniprot.org/uniprot/O60563].
Other Notes	Small volumes of anti-CCNT1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CCNT1 purchase	MBS3903764 is an antibody targeting CCNT1. Also known as Rabbit anti-Cyclin T1 Antibody, Affinity Purified. Reactive in Human. Host: Rabbit.



Immunohistochemistry (IHC) of anti-CCNT1 antibody
Detection of human Cyclin T1 by immunohistochemistry. Sample: FFPE section of human breast carcinoma. Antibody: Affinity purified rabbit anti-Cyclin T1 (Cat. No. MBS3903764 lot 1) used at a dilution of 1:200 (1ug/ml). Detection: DAB



Immunoprecipitation (IP) of anti-CCNT1 antibody
Detection of human Cyclin T1 by western blot of immunoprecipitates. Samples: Whole cell lysate (1 mg for IP, 20% of IP loaded) from HeLa cells. Antibodies: Affinity purified rabbit anti-Cyclin T1 antibody MBS3903764 (lot MBS3903764-1) used for IP at 6 ug/mg lysate. Cyclin T1 was also immunoprecipitated by rabbit anti-Cyclin T1 antibodies MBS3903762, MBS3903763 and MBS3903765, which recognize other epitopes. For blotting immunoprecipitated Cyclin T1, MBS3903764 was used at 1.0 ug/ml. Detection: Chemiluminescence with exposure time of 3 seconds.



Western Blot (WB) of anti-CCNT1 antibody
Detection of human Cyclin T1 by western blot. Samples: Whole cell lysate from HeLa (15 and 50 ug) and HEK293T (T; 50 ug) cells. Antibody: Affinity purified rabbit anti-Cyclin T1 antibody MBS3903764 (lot MBS3903764-1) used for IP at 6 ug/mg lysate. Cyclin T1 was also used at 0.04 ug/ml. Detection: Chemiluminescence with an exposure time of 30 seconds.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CCNT1. It may not necessarily be applicable to this product.

NCBI GI #	17978466
NCBI GeneID	904
NCBI Accession #	NP_001231.2
UniProt Primary Accession #	O60563
UniProt Secondary Accession #	O60581; A9XU13; E7EX76
UniProt Related Accession #	O60563
GenBank Nucleotide #	NM_001240.3
NCBI Official Full Name	cyclin-T1 isoform a
NCBI Official Synonym Full Names	cyclin T1
NCBI Official Symbol	CCNT1

NCBI Official Synonym Symbols	CCNT; CYCT1; HIVE1
UniProt Protein Name	Cyclin-T1
Protein Family	Cyclin
UniProt Gene Name	CCNT1
UniProt Synonym Gene Names	CycT1; Cyclin-T
UniProt Entry Name	CCNT1_HUMAN
NCBI Protein Information	cyclin-T1
NCBI Summary for CCNT1	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. [provided by RefSeq, Apr 2013]
UniProt Comments for CCNT1	CCNT1: Regulatory subunit of the cyclin-dependent kinase pair (CDK9/cyclin-T1) complex, also called positive transcription elongation factor B (P-TEFb), which is proposed to facilitate the transition from abortive to productive elongation by phosphorylating the CTD (carboxy-terminal domain) of the large subunit of RNA polymerase II (RNA Pol II). In case of HIV or SIV infections, binds to the transactivation domain of the viral nuclear transcriptional activator, Tat, thereby increasing Tat's affinity for the transactivating response RNA element (TAR RNA). Serves as an essential cofactor for Tat, by promoting RNA Pol II activation, allowing transcription of viral genes. Cyclin-T1 is the predominant cyclin that associates with CDK9 to form a heterodimer called P-TEFb. P-TEFb forms a complex with AFF4/AF5Q31. Interacts with the transactivation region of HIV-1, HIV-2 and SIV Tat. Component of a complex which is at least composed of HTATSF1/Tat-SF1, P-TEFb complex, RNA pol II, SUPT5H, and NCL/nucleolin. Component of the 7SK snRNP complex at least composed of P-TEFb (composed of CDK9 and CCNT1/cyclin-T1), HEXIM1, HEXIM2, BCDIN3, SART3 proteins and 7SK and U6 snRNAs. Interacts with MDFIC. Ubiquitously expressed. Belongs to the cyclin family. Cyclin C subfamily. Protein type: Cell cycle regulation; Transcription initiation complex Chromosomal Location of Human Ortholog: 12q13.11 Cellular Component: nucleoplasm; transcription elongation factor complex b; nucleolus; nucleus Molecular Function: protein binding; snRNA binding; DNA binding; chromatin binding; protein kinase binding Biological Process: transcription from RNA polymerase II promoter; transcription initiation from RNA polymerase II promoter; transcription, DNA-dependent; viral reproduction; positive regulation of viral transcription; cell cycle; protein amino acid phosphorylation; cell division; transforming growth factor beta receptor signaling pathway; RNA elongation from RNA polymerase II promoter; gene expression; positive regulation of transcription from RNA polymerase II promoter; regulation of cyclin-dependent protein kinase activity
Research Articles on CCNT1	**1.** the introduction of HIV-1 Tat and Mg12+ ion resulted in the active site architectural characteristics of phosphorylated CDK9/cyclin T1 complex
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-ccnt1-human-antibody/cyclin-t1/3903764