

CCNT1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10669c

Specification

CCNT1 Antibody (Center) - Product Information

Application	WB, FC,E
Primary Accession	O60563
Other Accession	NP_001231
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	80685
Antigen Region	253-281

CCNT1 Antibody (Center) - Additional Information

Gene ID 904

Other Names

Cyclin-T1, CycT1, Cyclin-T, CCNT1

Target/Specificity

This CCNT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 253-281 amino acids from the Central region of human CCNT1.

Dilution

WB~~1:1000

FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CCNT1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CCNT1 Antibody (Center) - 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

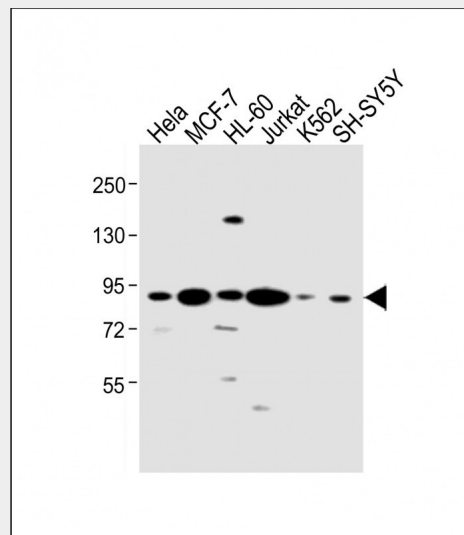
Ubiquitously expressed.

CCNT1 Antibody (Center) - Protocols

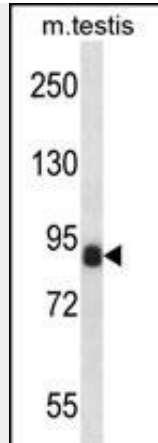
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

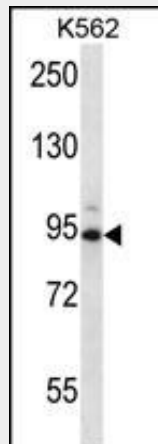
CCNT1 Antibody (Center) - Images



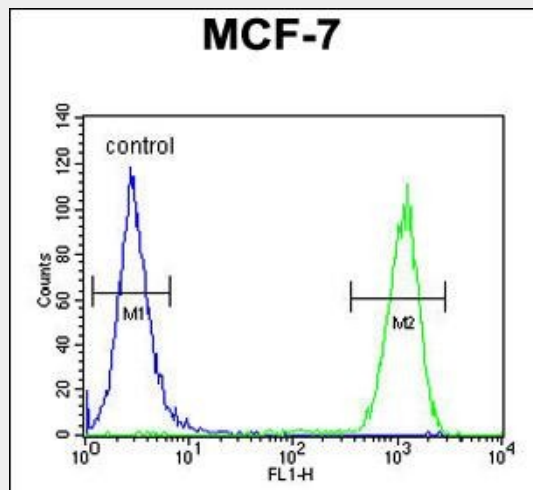
All lanes : Anti-CCNT1 Antibody (Center) at 1:1000 dilution Lane 1: HeLa whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: HL-60 whole cell lysate Lane 4: Jurkat whole cell lysate Lane 5: K562 whole cell lysate Lane 6: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 81 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



CCNT1 Antibody (Center) (Cat. #AP10669c) western blot analysis in mouse testis tissue lysates (35ug/lane). This demonstrates the CCNT1 antibody detected the CCNT1 protein (arrow).



CCNT1 Antibody (Center) (Cat. #AP10669c) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the CCNT1 antibody detected the CCNT1 protein (arrow).



CCNT1 Antibody (Center) (Cat. #AP10669c) flow cytometric analysis of MCF-7 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CCNT1 Antibody (Center) - Background

CCNT1 belongs to the highly

conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin tightly associates with CDK9 kinase, and was found to be a major subunit of the transcription elongation factor p-TEFb. The kinase complex containing this cyclin and the elongation factor can interact with, and act as a cofactor of human immunodeficiency virus type 1 (HIV-1) Tat protein, and was shown to be both necessary and sufficient for full activation of viral transcription. This cyclin and its kinase partner were also found to be involved in the phosphorylation and regulation of the carboxy-terminal domain (CTD) of the largest RNA polymerase II subunit.

CCNT1 Antibody (Center) - References

Moiola, C., et al. Cell Cycle 9(15):3119-3126(2010)
Schonichen, A., et al. Biochemistry 49(14):3083-3091(2010)
Czudnochowski, N., et al. J. Mol. Biol. 395(1):28-41(2010)
Kapasi, A.J., et al. J. Virol. 83(11):5904-5917(2009)
Cho, S., et al. EMBO J. 28(10):1407-1417(2009)

CCNT1 Antibody (Center) - Citations

- [Low expression of BEX1 predicts poor prognosis in patients with esophageal squamous cell cancer.](#)