10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CCNT1 / Cyclin T1 Antibody (C-Terminus)

Rabbit Polyclonal Antibody
Catalog # ALS16009

Specification

CCNT1 / Cyclin T1 Antibody (C-Terminus) - Product Information

Application	**WB, IF, IHC**
Primary Accession	O60563
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**81kDa KDa**

CCNT1 / Cyclin T1 Antibody (C-Terminus) - Additional Information

Gene ID 904

Other Names
Cyclin-T1, CycT1, Cyclin-T, CCNT1

Target/Specificity
Human CCNT1 / Cyclin T1

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
CCNT1 / Cyclin T1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

CCNT1 / Cyclin T1 Antibody (C-Terminus) - 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:35393539, PubMed:30134174). 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

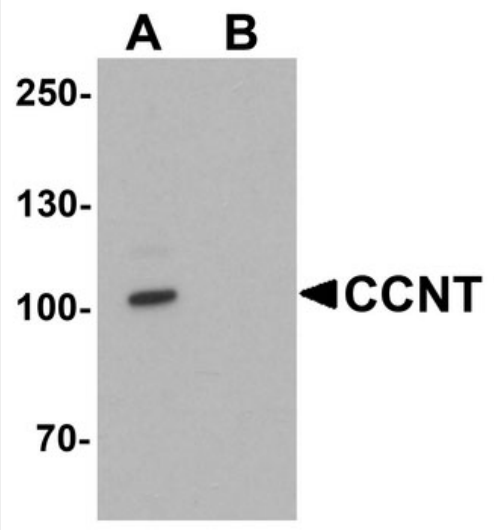
Tissue Location
Ubiquitously expressed.

CCNT1 / Cyclin T1 Antibody (C-Terminus) - Protocols

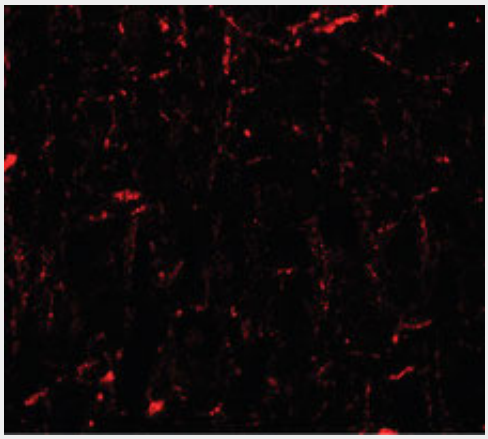
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CCNT1 / Cyclin T1 Antibody (C-Terminus) - Images

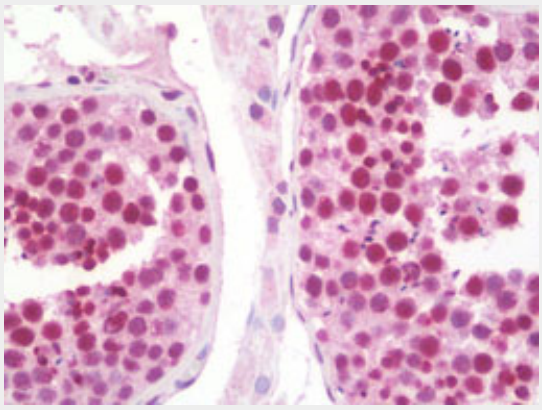


Western blot analysis of CCNT1 in rat brain tissue lysate with CCNT1 antibody at 1 ug/ml in (A)...



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Immunofluorescence of CCNT1 in rat brain tissue with CCNT1 antibody at 20 ug/ml.



Anti-CCNT1 / Cyclin T1 antibody IHC staining of human testis.

CCNT1 / Cyclin T1 Antibody (C-Terminus) - Background

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.

CCNT1 / Cyclin T1 Antibody (C-Terminus) - References

Wei P.,et al.Cell 92:451-462(1998).
Peng J.-M.,et al.Genes Dev. 12:755-762(1998).
Wu X.,et al.Submitted (JUN-2007) to the EMBL/GenBank/DDBJ databases.
Scherer S.E.,et al.Nature 440:346-351(2006).
Parada C.A.,et al.EMBO J. 18:3688-3701(1999).