



CCNT1 Polyclonal Antibody

E92057

Catalog Number: E92057**Amount:** 100ul

Background: Positive transcription elongation factor (P-TEFb) is a heterodimer composed of cyclin T proteins and CDK9. P-TEFb plays a critical role in the transition of the RNA polymerase II (RNAPII) machinery from transcription initiation to elongation (1). At some genes during transcription initiation, RNAPII moves approximately 50 nucleotides away from the transcription start site into the gene where it then pauses and awaits signaling for the formation of a productive transcription elongation complex (1,2). The release of this promoter proximal pausing of RNAPII is signaled by phosphorylation of the C-terminal domain (CTD) within the largest subunit of RNAPII at Ser2 of the heptapeptide repeat sequence by P-TEFb (3). This phosphorylation event is important for the recruitment of mRNA processing factors and chromatin modifiers that are necessary for proper gene expression (4,5). P-TEFb also promotes transcription elongation by phosphorylating DSIF (DRB-induced stimulating factor) and NELF (negative elongation factor), two negative elongation factors that retain RNAPII at the promoter proximal region of genes to initiate transcription elongation (6,7).

Species: Rabbit**Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Synonyms: CCNT; CYCT1; HIVE1; Cyclin T1;**Immunogen:** A synthetic peptide of human CCNT1**Purification:** Affinity purification**Reactivity:** H M R**Applications:** WB IHC**Molecular Weight:** 81kDa**Swiss-Prot No. :** O60563**Gene ID:** 904

References: 1. Cho, S. et al. (2010) Cell Cycle 9, 1697-705. 2. Saunders, A. et al. (2006) Nat Rev Mol Cell Biol 7, 557-67. 3. Buratowski, S. (2009) Mol Cell 36, 541-6. 4. Lenasi, T. and Barboric, M. RNA Biol 7, 145-50. 5. Pirngruber, J. et al. (2009) Cell Cycle 8, 3636-42. 6. Wada, T. et al. (1998) EMBO J 17, 7395-403. 7. Yamada, T. et al. (2006) Mol Cell 21, 227-37.

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