

## Recombinant CDK9 / CyclinT1 protein complex

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**Catalog No:** 82036, 82636

**Quantity:** 20, 1000 µg

**Expressed In:** Baculovirus

**Source:** Human

**Buffer Contents:** Recombinant CDK9 / CyclinT1 Complex is supplied in 25 mM HEPES pH 7.5, 300 mM NaCl, 20% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

**Background:** **CDK9** is a member of the CDC2-like family of kinases. Its cyclin partners are members of the CYCLIN T family (T1, T2a, and T2b) and CYCLIN K. The **CDK9/CYCLIN T1** complex is very important in the differentiation programming of several cell types, including muscle cells and neurons, controlling specific differentiation pathways.

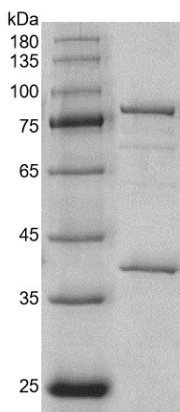
**Protein Details:** Recombinant CDK9 / CyclinT1 Complex that includes full length human CDK9 protein (accession number NP\_001252.1) without tag and full-length human Cyclin-T1 protein (accession number NP\_001231.2) with an N-terminal FLAG tag was expressed in Hi5 cells. The molecular weights of CDK9 and CyclinT1 are 42.76 kDa and 81.95 kDa, respectively.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for this product is shown.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

### CDK9 / Cyclin T1 Complex



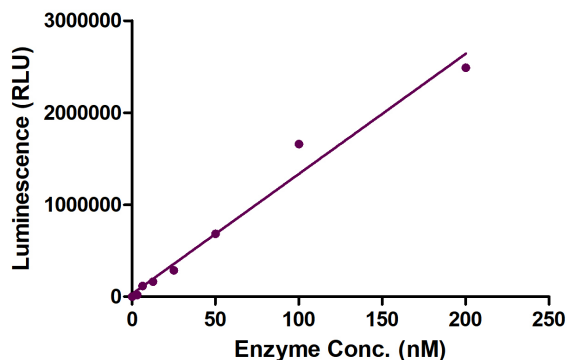
### Recombinant CDK9 / CyclinT1 complex

10% SDS-PAGE Coomassie staining

MW: CDK9: 42.76 kDa, Cyclin-T1:81.95 kDa

Purity:  $\geq 90\%$

### CDK9 / CyclinT1 Complex Titration



### ADP-Glo assay for CDK9 / CyclinT1 Complex activity

0.2  $\mu\text{g}/\mu\text{l}$  PDKtide peptide substrate was incubated with different concentrations of CDK9 / CyclinT1 Complex protein in a 10  $\mu\text{l}$  reaction system containing 40 mM Tris-HCl pH 7.4, 20 mM  $\text{MgCl}_2$ , 50  $\mu\text{M}$  DTT, 0.1 mg/ml BSA and 100  $\mu\text{M}$  ATP for 1 hour, then add 10  $\mu\text{l}$  ADP-Glo Reagent at RT for 60min. Then add 20  $\mu\text{l}$  Kinase Detection Reagent incubates at RT for 60min. All the operations and reactions were performed at RT. Finally, Luminescence measurement is collected by BMG.