

For Research Use Only

# Phospho-CDK9 (Thr186) Recombinant monoclonal antibody, PBS Only

Catalog Number: 87523-1-PBS



## Basic Information

<b>Catalog Number:</b> 87523-1-PBS	<b>GenBank Accession Number:</b> NM_001261	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1025	<b>CloneNo.:</b> 252873G2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P50750	
<b>Isotype:</b> IgG	<b>Full Name:</b> cyclin-dependent kinase 9	
	<b>Calculated MW:</b> 43 kDa	
	<b>Observed MW:</b> 42 kDa	

## Applications

**Tested Applications:**  
WB, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Background Information

CDK9(Cyclin-dependent kinase 9) is a member of the Cdc2-like family of kinases. Its cyclin partners are members of the family of cyclin T (T1, T2a and T2b) and cyclin K. Phospho-CDK9 (Thr186) is the active-site-switching modification of the catalytic subunit of P-TEFb (positive transcription elongation factor b). Phosphorylation at threonine 186, located in the T-loop of CDK9, is essential for full kinase activity: it swings the T-loop away from the catalytic cleft, allowing ATP and protein substrates (e.g., the C-terminal domain of RNA polymerase II, DSIF and NELF) to enter and be efficiently phosphorylated. Thus, p-Thr186-CDK9 licenses the elongation step of most protein-coding transcripts and is indispensable for productive mRNA synthesis. (PMID: 39800748)

## Storage

**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

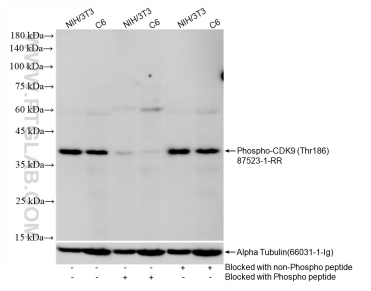
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## Selected Validation Data



NIH/3T3 cell lysates and C6 cell lysates were subjected to SDS PAGE followed by western blot with 87523-1-RR (Phospho-CDK9 (Thr186) antibody) blocked with BSA only, Phospho-CDK9 (Thr186) peptide or non-Phospho peptide at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87523-1-PBS in a different storage buffer formulation.