

For Research Use Only

# CDK12/CRKRS Recombinant antibody

Catalog Number: 86296-3-RR



## Basic Information

<b>Catalog Number:</b> 86296-3-RR	<b>GenBank Accession Number:</b> BC150265	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 51755	<b>CloneNo.:</b> 250880E5
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9NYV4	<b>Recommended Dilutions:</b> WB: 1:1000-1:6000 IF/ICC: 1:500-1:2000
<b>Isotype:</b> IgG	<b>Full Name:</b> Cdc2-related kinase, arginine/serine-rich	
<b>Immunogen Catalog Number:</b> AG25312	<b>Calculated MW:</b> 1490 aa, 164 kDa	
	<b>Observed MW:</b> 180-200 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human, mouse	<b>WB :</b> HeLa cells, NIH/3T3 cells, HEK-293T cells, Jurkat cells, K-562 cells <b>IF/ICC :</b> HeLa cells, NIH/3T3 cells

## Background Information

CRKRS (Cdc2-related kinase, Arg/Ser), also named as cyclin-dependent kinase 12 (CKD12), belongs to CDC2/CDKX subfamily. CDK12 can form a heterodimeric complex with its activating partner, cyclin K, to regulate important cellular physiological processes that include transcriptional regulation, regulation of DNA damage repair genes such as BRCA1 and ATM, suppression of intronic polyadenylation, and susceptibility to PARP inhibitors (PMID: 30487607, 24240700, 31694772). CDK12 has 3 isoforms with the calculated molecular mass of 164/163/141 kDa, and the apparent molecular mass of 180-200 kDa due to some modifications (PMID 11683387, 22988298).

## Storage

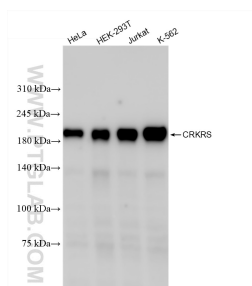
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

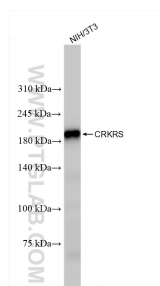
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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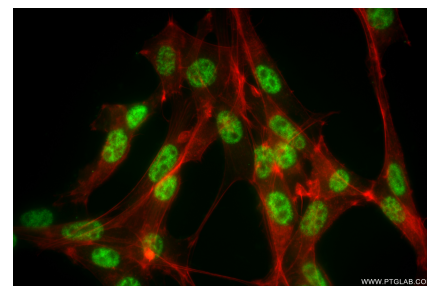
## Selected Validation Data



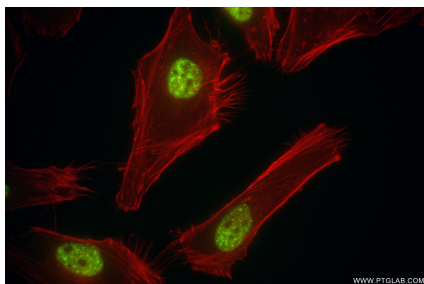
Various lysates were subjected to SDS PAGE followed by western blot with 86296-3-RR (CDK12/CRKRS antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



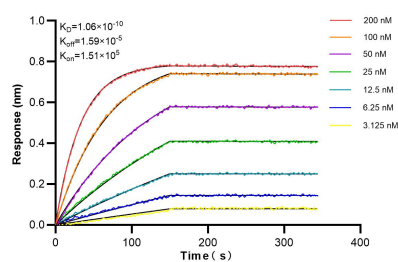
NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 86296-3-RR (CDK12/CRKRS antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using CDK12/CRKRS antibody (86296-3-RR, Clone: 250880E5 ) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CDK12/CRKRS antibody (86296-3-RR, Clone: 250880E5 ) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 86296-3-RR against Human CDK12/CRKRS were performed. The affinity constant is 0.106 nM.