

**CDK12 / CRKRS Antibody (C-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10900****Specification**

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**CDK12 / CRKRS Antibody (C-Terminus) - Product Information**

Application	IHC
Primary Accession	<a href="#">Q9NYV4</a>
Reactivity	Human, Mouse, Rabbit, Hamster, Monkey, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	164kDa KDa

**CDK12 / CRKRS Antibody (C-Terminus) - Additional Information****Gene ID** 51755**Other Names**

Cyclin-dependent kinase 12, 2.7.11.22, 2.7.11.23, Cdc2-related kinase, arginine/serine-rich, CrkRS, Cell division cycle 2-related protein kinase 7, CDC2-related protein kinase 7, Cell division protein kinase 12, hCDK12, CDK12, CRK7, CRKRS, KIAA0904

**Target/Specificity**

Human CDK12 / CRKRS. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except POMT1 (37%).

**Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

**Precautions**

CDK12 / CRKRS Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**CDK12 / CRKRS Antibody (C-Terminus) - Protein Information****Name** CDK12**Synonyms** CRK7, CRKRS, KIAA0904**Function**

Cyclin-dependent kinase that phosphorylates the C-terminal domain (CTD) of the large subunit of RNA polymerase II (POLR2A), thereby acting as a key regulator of transcription elongation. Regulates the expression of genes involved in DNA repair and is required for the maintenance of genomic stability. Preferentially phosphorylates 'Ser-5' in CTD repeats that are already phosphorylated at 'Ser-7', but can also phosphorylate 'Ser-2'. Required for RNA splicing, possibly by phosphorylating SRSF1/SF2. Involved in regulation of MAP kinase activity, possibly leading to affect the response to estrogen inhibitors.

**Cellular Location**

Nucleus. Nucleus speckle. Note=Colocalized with nuclear speckles throughout interphase.

**Tissue Location**

Widely expressed..

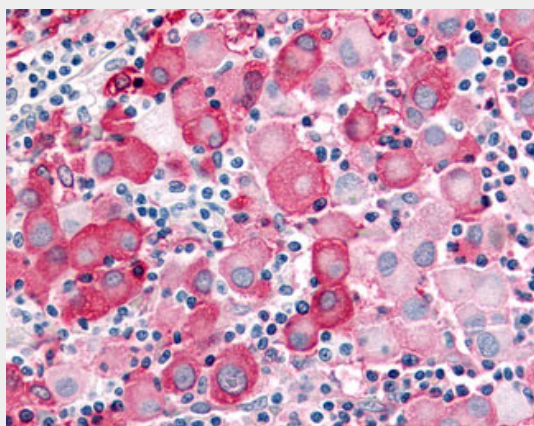
**Volume**

50  $\mu$ l

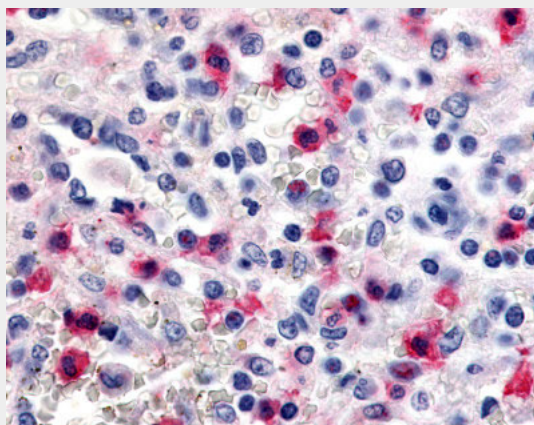
**CDK12 / CRKRS Antibody (C-Terminus) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**CDK12 / CRKRS Antibody (C-Terminus) - Images**

Anti-CDK12 / CRKRS antibody IHC of human Skin, Melanoma.



Anti-CDK12 / CRKRS antibody ALS10900 IHC of human spleen.

**CDK12 / CRKRS Antibody (C-Terminus) - Background**

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**CDK12 / CRKRS Antibody (C-Terminus) - References**

Ko T.K.,et al.J. Cell Sci. 114:2591-2603(2001).  
Nagase T.,et al.DNA Res. 5:355-364(1998).  
Nakajima D.,et al.DNA Res. 9:99-106(2002).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Zody M.C.,et al.Nature 440:1045-1049(2006).