

CDK12 / CRKRS Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS10901

Specification

CDK12 / CRKRS Antibody (Internal) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>O9NYV4</u> Human, Monkey, Dog Rabbit Polyclonal 164kDa KDa

CDK12 / CRKRS Antibody (Internal) - 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 AKAP12 (55%).

Reconstitution & Storage Long term: -70°C; Short term: +4°C

Precautions CDK12 / CRKRS Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

CDK12 / CRKRS Antibody (Internal) - 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..

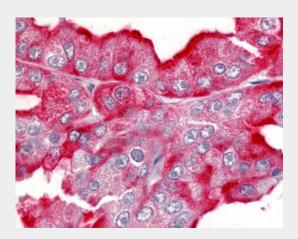
Volume 50 μl

CDK12 / CRKRS Antibody (Internal) - Protocols

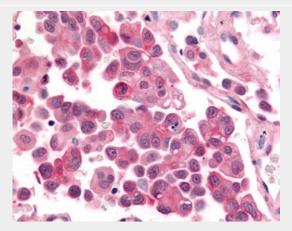
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CDK12 / CRKRS Antibody (Internal) - Images



Anti-CDK12 / CRKRS antibody IHC of human Prostate, Carcinoma.



Anti-CDK12 / CRKRS antibody IHC of human Lung, Non-Small Cell Carcinoma.



CDK12 / CRKRS Antibody (Internal) - Background

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CDK12 / CRKRS Antibody (Internal) - 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).