

CrkRS (CRK7) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7533A

Specification

CrkRS (CRK7) Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O9NYV4</u> <u>O3MJK5</u>, <u>O14AX6</u> Human, Mouse Rat Rabbit Polyclonal Rabbit IgG 164155 1-30

CrkRS (CRK7) Antibody (N-term) - Additional Information

Gene ID 51755

Other Names

Cyclin-dependent kinase 12, 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

This CrkRS (CRK7) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human CrkRS (CRK7).

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CrkRS (CRK7) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CrkRS (CRK7) Antibody (N-term) - 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..

CrkRS (CRK7) Antibody (N-term) - Protocols

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

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

CrkRS (CRK7) Antibody (N-term) - Images



The anti-CRK7 Pab (Cat. #AP7533a) is used in Western blot to detect CRK7 in mouse liver tissue lysate.

CrkRS (CRK7) Antibody (N-term) - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally



the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

CrkRS (CRK7) Antibody (N-term) - References

Ko, T.K., et al., J. Cell. Sci. 114 (Pt 14), 2591-2603 (2001).