

MCRS1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16872A**Specification**

MCRS1 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O96EZ8
Other Accession	O99L90 , NP_006328.2 , NP_001012300.1
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	51803
Antigen Region	35-63

MCRS1 Antibody (N-term) - Additional Information**Gene ID** 10445**Other Names**

Microspherule protein 1, 58 kDa microspherule protein, Cell cycle-regulated factor p78, INO80 complex subunit J, MCRS2, MCRS1, INO80Q, MSP58

Target/Specificity

This MCRS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 35-63 amino acids from the N-terminal region of human MCRS1.

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 purified through a protein A column, followed by peptide affinity purification.

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

MCRS1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MCRS1 Antibody (N-term) - Protein Information**Name** MCRS1

Synonyms INO80Q, MSP58

Function Modulates the transcription repressor activity of DAXX by recruiting it to the nucleolus (PubMed:[11948183](#)). As part of the NSL complex, may be involved in acetylation of nucleosomal histone H4 on several lysine residues (PubMed:[20018852](#)). Putative regulatory component of the chromatin remodeling INO80 complex which is involved in transcriptional regulation, DNA replication and probably DNA repair. May also be an inhibitor of TERT telomerase activity (PubMed:[15044100](#)). Binds to G-quadruplex structures in mRNA (PubMed:[16571602](#)). Binds to RNA homomer poly(G) and poly(U) (PubMed:[16571602](#)). Maintains RHEB at the lysosome in its active GTP-bound form and prevents its interaction with the mTORC1 complex inhibitor TSC2, ensuring activation of the mTORC1 complex by RHEB (PubMed:[25816988](#)). Stabilizes the minus ends of kinetochore fibers by protecting them from depolymerization, ensuring functional spindle assembly during mitosis (PubMed:[22081094](#), PubMed:[27192185](#)). Following phosphorylation by TTK/MPS1, enhances recruitment of KIF2A to the minus ends of mitotic spindle microtubules which promotes chromosome alignment (PubMed:[30785839](#)). Regulates the morphology of microtubule minus ends in mitotic spindle by maintaining them in a closed conformation characterized by the presence of an electron-dense cap (PubMed:[36350698](#)). Regulates G2/M transition and spindle assembly during oocyte meiosis (By similarity). Mediates histone modifications and transcriptional regulation in germinal vesicle oocytes which are required for meiotic progression (By similarity). Also regulates microtubule nucleation and spindle assembly by activating aurora kinases during oocyte meiosis (By similarity). Contributes to the establishment of centriolar satellites and also plays a role in primary cilium formation by recruiting TTBK2 to the mother centriole which is necessary for removal of the CP110 cap from the mother centriole, an early step in ciliogenesis (PubMed:[27263857](#)). Required for epiblast development during early embryogenesis (By similarity). Essential for cell viability (PubMed:[16547491](#)).

Cellular Location

Nucleus. Nucleus, nucleolus Cytoplasm Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Chromosome, centromere, kinetochore. Chromosome {ECO:0000250|UniProtKB:Q99L90}. Lysosome Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite. Note=Predominantly concentrated in the nucleus but also localizes to the centrosome (PubMed:[16547491](#)). Detected on the spindle poles during mitosis from prometaphase to telophase (PubMed:[16547491](#)). Found in microspherules in the nucleolus (PubMed:[9654073](#)). Localizes to lysosomes under high amino acid concentration conditions (PubMed:[25816988](#)). Localizes to the minus ends of kinetochore fibers and chromosomal microtubules (PubMed:[22081094](#)). Present in the nucleus of germinal vesicle oocytes and associates with spindles poles and chromosomes after germinal vesicle breakdown (By similarity). {ECO:0000250|UniProtKB:Q99L90, ECO:0000269|PubMed:[16547491](#), ECO:0000269|PubMed:[22081094](#), ECO:0000269|PubMed:[25816988](#), ECO:0000269|PubMed:[9654073](#)}

Tissue Location

Detected in testis, and at lower levels in spleen, thymus, prostate, uterus, small intestine, colon and leukocytes

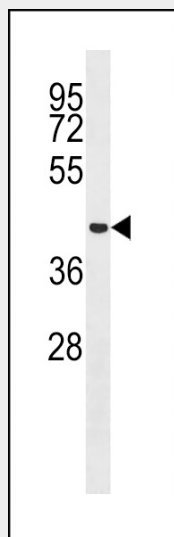
MCRS1 Antibody (N-term) - Protocols

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](#)

MCRS1 Antibody (N-term) - Images



MCRS1 Antibody (N-term) (Cat. #AP16872a) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the MCRS1 antibody detected the MCRS1 protein (arrow).

MCRS1 Antibody (N-term) - Background

MCRS1 modulates the transcription repressor activity of DAXX by recruiting it to the nucleolus. May be an inhibitor of TERT telomerase activity.

MCRS1 Antibody (N-term) - References

Lin, W., et al. J. Cell. Mol. Med. 13 (11-12), 4608-4622 (2009) :
Shi, H., et al. Cancer Sci. 100(9):1585-1590(2009)
Venkatesan, K., et al. Nat. Methods 6(1):83-90(2009)
Wu, J.L., et al. BMC Cell Biol. 10, 9 (2009) :
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :