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KD-Validated Anti-CINP Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI2021

Specification

KD-Validated Anti-CINP Mouse Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q9BW66
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Mouse IgG2b**
Calculated MW	**Predicted, 24 kDa, observed, 27 kDa KDa**
Gene Name	**CINP**
Aliases	**CINP; Cyclin Dependent Kinase 2 Interacting Protein; Cyclin-Dependent Kinase 2-Interacting Protein; CDK2-Interacting Protein; MGC849**
Immunogen	**Recombinant protein of human CINP**

KD-Validated Anti-CINP Mouse Monoclonal Antibody - Additional Information

Gene ID **51550**

Other Names
Cyclin-dependent kinase 2-interacting protein, CDK2-interacting protein, CINP {ECO:0000303|PubMed:19889979, ECO:0000312|HGNC:HGNC:23789}

KD-Validated Anti-CINP Mouse Monoclonal Antibody - Protein Information

Name CINP {ECO:0000303|PubMed:19889979, ECO:0000312|HGNC:HGNC:23789}

Function
Component of the DNA replication complex, which interacts with two kinases, CDK2 and CDC7, thereby providing a functional and physical link between CDK2 and CDC7 during firing of the origins of replication (PubMed:16082200, PubMed:19889979). Regulates ATR-mediated checkpoint signaling in response to DNA damage (PubMed:16082200, PubMed:19889979). Part of the 55LCC heterohexameric ATPase complex which is chromatin-associated and promotes replisome proteostasis to maintain replication fork progression and genome stability. Required for replication fork progression, sister chromatid cohesion, and chromosome stability. The ATPase activity is specifically enhanced by replication fork DNA and is coupled to cysteine protease-dependent cleavage of replisome substrates in response to replication fork damage. Uses ATPase activity to process replisome substrates in S-phase, facilitating their proteolytic turnover from chromatin to ensure DNA replication and mitotic fidelity (PubMed:38554706). As part of 55LCC complex, also involved in the cytoplasmic maturation steps of pre-60S ribosomal particles by promoting the release of shuttling protein

RSL24D1/RLP24 from the pre-ribosomal particles (PubMed:35354024).

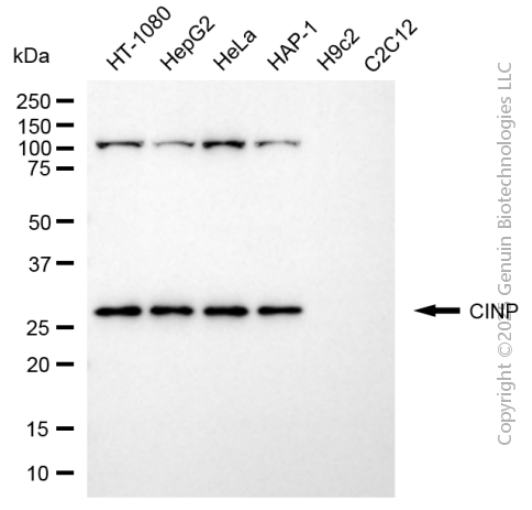
Cellular Location
Nucleus. Note=Binds to nuclear under G1 conditions, and dissociates from chromatin with the start of DNA replication.

KD-Validated Anti-CINP Mouse Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-CINP Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-CINP antibody (Cat#AGI2021). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CINP antibody (Cat#AGI2021, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.

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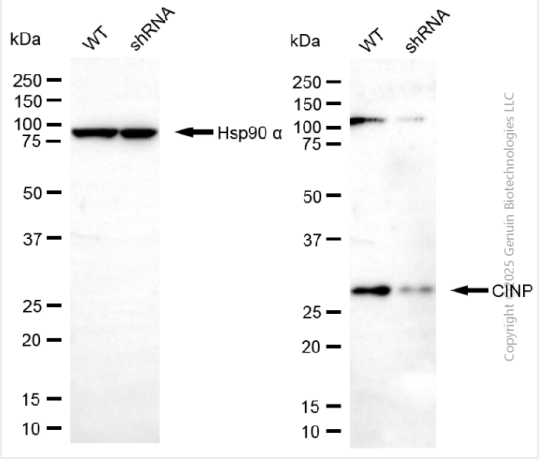

Western blotting analysis using anti-CINP antibody (Cat#AGI2021). CINP expression in wild type (WT) and CINP shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-CINP antibody (Cat#AGI2021, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.