

Mouse Sdccag1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19221a

Specification

Mouse Sdccag1 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q8CCP0
Other Accession	NP_079717.2
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	121188
Antigen Region	236-264

Mouse Sdccag1 Antibody (N-term) - Additional Information

Gene ID 66244

Other Names

Nuclear export mediator factor Nemf, Serologically defined colon cancer antigen 1 homolog, Nemf, Sdccag1

Target/Specificity

This Mouse Sdccag1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 236-264 amino acids from the N-terminal region of mouse Sdccag1.

Dilution

WB~~1:1000

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

Mouse Sdccag1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Sdccag1 Antibody (N-term) - Protein Information

Name Nemf {ECO:0000303|PubMed:32934225, ECO:0000312|MGI:MGI:1918305}

Function Key component of the ribosome quality control complex (RQC), a ribosome-associated

complex that mediates the extraction of incompletely synthesized nascent chains from stalled ribosomes as well as their ubiquitin-mediated proteasomal degradation (PubMed:[33406423](#)). Thereby, frees 60S subunit ribosomes from the stalled translation complex and prevents the accumulation of nascent polypeptide chains that are potentially toxic for the cell (PubMed:[33406423](#)). Within the RQC complex, NEMF specifically binds stalled 60S ribosomal subunits by recognizing an exposed, nascent chain-conjugated tRNA moiety and promotes the recruitment of LTN1 to stalled 60S subunits (By similarity). Following binding to stalled 60S ribosomal subunits, NEMF mediates CAT tailing by recruiting alanine-charged tRNA to the A-site and directing the elongation of stalled nascent chains independently of mRNA or 40S subunits, leading to non-templated C-terminal alanine extensions (CAT tails) (PubMed:[33406423](#)). Mainly recruits alanine- charged tRNAs, but can also other amino acid-charged tRNAs (By similarity). CAT tailing is required to promote ubiquitination of stalled nascent chains by different E3 ubiquitin-protein ligases (By similarity). In the canonical RQC pathway (RQC-L), CAT tailing facilitates LTN1-dependent ubiquitination by exposing lysine residues that would otherwise remain buried in the ribosomal exit tunnel (By similarity). In the alternative RQC pathway (RQC-C) CAT tailing creates an C-degron mainly composed of alanine that is recognized by the CRL2(KLHDC10) and RCHY1/PIRH2 E3 ligases, leading to ubiquitination and degradation of stalled nascent chains (By similarity). NEMF may also indirectly play a role in nuclear export (By similarity).

Cellular Location

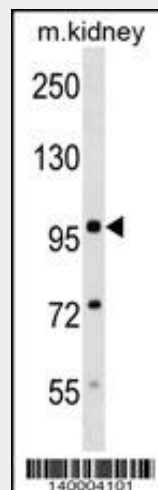
Cytoplasm, cytosol {ECO:0000250|UniProtKB:O60524}. Nucleus {ECO:0000250|UniProtKB:O60524}

Mouse Sdccag1 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](#)

Mouse Sdccag1 Antibody (N-term) - Images



Mouse Sdccag1 Antibody (N-term) (Cat. #AP19221a) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the Sdccag1 antibody detected the Sdccag1 protein (arrow).

Mouse Sdccag1 Antibody (N-term) - Background

SDCG1, serologically defined colon cancer antigen 1, belongs to the SDCCAG1 family. 2 isoforms of the human protein are produced by alternative splicing.

Mouse Sdccag1 Antibody (N-term) - References

Zambrowicz, B.P., et al. Proc. Natl. Acad. Sci. U.S.A. 100(24):14109-14114(2003)
Stryke, D., et al. Nucleic Acids Res. 31(1):278-281(2003)