SDCCAG1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18740a

Specification

SDCCAG1 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	[O60524](#)
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**122954**
Antigen Region	**236-264**

SDCCAG1 Antibody (N-term) - Additional Information

Gene ID 9147

Other Names
Nuclear export mediator factor NEMF, Antigen NY-CO-1, Serologically defined colon cancer antigen 1, NEMF, SDCCAG1

Target/Specificity
This SDCCAG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 236-264 amino acids from the N-terminal region of human 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
SDCCAG1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SDCCAG1 Antibody (N-term) - Protein Information

Name NEMF {ECO:0000303|PubMed:33048237, ECO:0000312|HGNC:HGNC:10663}

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:25578875, PubMed:32726578, PubMed:33406423, PubMed:33909987). 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:25578875, PubMed:33406423, PubMed:33909987). 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 (PubMed:25578875). 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, PubMed:33909987). Mainly recruits alanine-charged tRNAs, but can also other amino acid-charged tRNAs (PubMed:33406423, PubMed:33909987). CAT tailing is required to promote ubiquitination of stalled nascent chains by different E3 ubiquitin-protein ligases (PubMed:33909987). 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 (PubMed:33909987). NEMF may also indirectly play a role in nuclear export (PubMed:16103875).

**Cellular Location**
Cytoplasm, cytosol. Nucleus

Tissue Location
Expressed in brain, heart, liver, lung, spleen, and skeletal muscle. Also expressed at lower levels in stomach and testis

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 Cytomety
- Cell Culture

SDCCAG1 Antibody (N-term) - Images
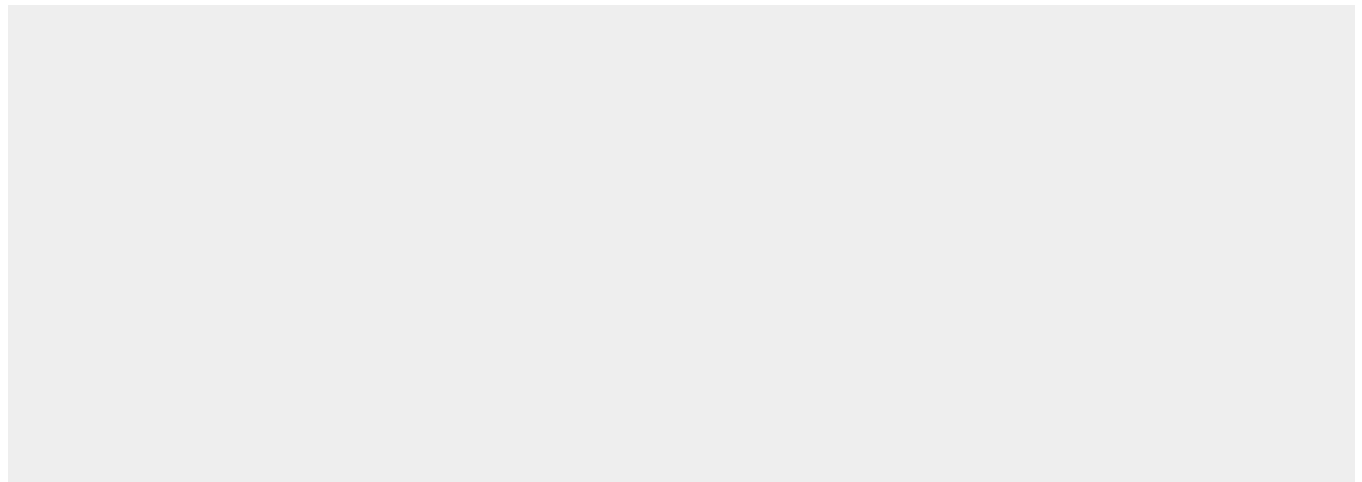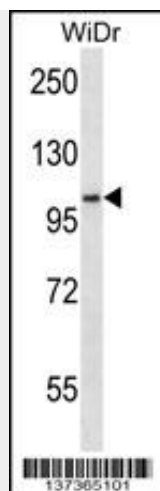
SDCCAG1 Antibody (N-term)(Cat. #AP18740a) western blot analysis in WiDr cell line lysates (35ug/lane).This demonstrates the SDCCAG1 antibody detected the SDCCAG1 protein (arrow).

SDCCAG1 Antibody (N-term) - Background

The function of this protein remains unknown.