

KD-Validated Anti-ASCC2 Mouse Monoclonal Antibody Mouse monoclonal antibody Catalog # AGI1933

Specification

KD-Validated Anti-ASCC2 Mouse Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases WB <u>O9H118</u> Rat, Human, Mouse Monoclonal Mouse IgG1 Predicted, 86 kDa, observed, 86 kDa KDa ASCC2 ASCC2; Activating Signal CointegRator 1 Complex Subunit 2; ASC1p100; ASC-1 Complex Subunit P100; Trip4 Complex Subunit P100; DKFZp58600223; FLJ21588; ASC 1 Complex Subunit P100; ASC1P100; P100; RQT3 Recombinant protein of human ASCC2

Immunogen

KD-Validated Anti-ASCC2 Mouse Monoclonal Antibody - Additional Information

Gene ID 84164 Other Names Activating signal cointegrator 1 complex subunit 2, ASC-1 complex subunit p100, Trip4 complex subunit p100, ASCC2, ASC1P100, RQT3 {ECO:0000303|PubMed:32099016}

KD-Validated Anti-ASCC2 Mouse Monoclonal Antibody - Protein Information

Name ASCC2

Synonyms ASC1P100, RQT3 {ECO:0000303|PubMed:32099

Function

Ubiquitin-binding protein involved in DNA repair and rescue of stalled ribosomes (PubMed:29144457, PubMed:32099016, PubMed:32579943, PubMed:36302773). Plays a role in DNA damage repair as component of the ASCC complex (PubMed:29144457). Recruits ASCC3 and ALKBH3 to sites of DNA damage by binding to polyubiquitinated proteins that have 'Lys-63'-linked polyubiquitin chains (PubMed:29144457). Part of the ASC-1 complex that enhances NF-kappa-B, SRF and AP1 transactivation (PubMed:29144457

target="_blank">12077347). Involved in activation of the ribosome quality control (RQC) pathway, a pathway that degrades nascent peptide chains during problematic translation



(PubMed:32099016, PubMed:32579943, PubMed:36302773). Specifically recognizes and binds RPS20/uS10 ubiquitinated by ZNF598, promoting recruitment of the RQT (ribosome quality control trigger) complex on stalled ribosomes, followed by disassembly of stalled ribosomes (PubMed:36302773).

Cellular Location

Nucleus. Nucleus speckle Note=Colocalizes with the spliceosomal components PRPF8 and SNRNP200/BRR2 in nuclear foci when cells have been exposed to alkylating agents that cause DNA damage. Colocalizes with RNF113A and 'Lys-63'-linked polyubiquitinated proteins, ALKBH3 and ASCC3 in nuclear foci when cells have been exposed to alkylating agents that cause DNA damage.

Tissue Location Ubiquitous..

KD-Validated Anti-ASCC2 Mouse Monoclonal Antibody - Protocols

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

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

KD-Validated Anti-ASCC2 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-ASCC2 antibody (Cat#AGI1933). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ASCC2 antibody (Cat#AGI1933, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.





Western blotting analysis using anti-ASCC2 antibody (Cat#AGI1933). ASCC2 expression in wild type (WT) and ASCC2 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-ASCC2 antibody (Cat#AGI1933, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.