

ASCC2 (14E10) Rabbit Monoclonal Antibody

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Product Information

Application WB

Primary Accession

Reactivity

Rat, Human, Mouse

Clonality Monoclonal Calculated MW 86360

Additional Information

Gene ID 84164

Dilution WB~~1:1000

Storage Conditions -20°C

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:<u>29144457</u>, PubMed:<u>32099016</u>, PubMed:<u>32579943</u>, PubMed:<u>36302773</u>). Plays a role in DNA damage repair as component of the ASCC complex (PubMed:<u>29144457</u>). 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:<u>12077347</u>). 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

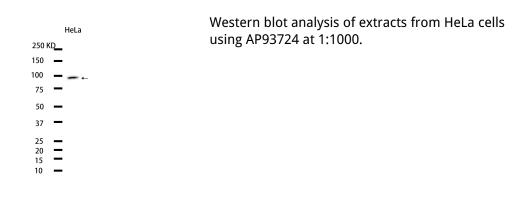
components PRPF8 and SNRNP200/BRR2 in nuclear foci when cells have been exposed to alkylating agents that cause DNA damage. Colocalizes with RNF113A and 'Lys-63'-linked polyubiquitinated proteins, ALKBH3 and ASCC3 in nuclear foci when cells have been exposed to alkylating agents that cause

DNA damage.

Background

Predicted to enable ubiquitin binding activity. Involved in regulation of transcription, DNA-templated; rescue of stalled ribosome; and ribosome-associated ubiquitin-dependent protein catabolic process. Located in nucleus. Part of activating signal cointegrator 1 complex. [provided by Alliance of Genome Resources, Apr 2022]

Images



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