

TRAIP Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP2820b**Specification**

TRAIP Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9BWF2](#)**TRAIP Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 10293

Other Names

E3 ubiquitin-protein ligase TRAIP, 632-, RING finger protein 206, TRAF-interacting protein, TRAIP, RNF206, TRIP

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2820b](/products/AP2820b) was selected from the C-term region of human TRAIP. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TRAIP Antibody (C-term) Blocking Peptide - Protein Information**Name** TRAIP {ECO:0000303|PubMed:26595769, ECO:0000312|HGNC:HGNC:30764}**Function**

E3 ubiquitin ligase required to protect genome stability in response to replication stress (PubMed: [25335891](http://www.uniprot.org/citations/25335891), PubMed: [26595769](http://www.uniprot.org/citations/26595769), PubMed: [26711499](http://www.uniprot.org/citations/26711499), PubMed: [26781088](http://www.uniprot.org/citations/26781088), PubMed: [27462463](http://www.uniprot.org/citations/27462463), PubMed: [31545170](http://www.uniprot.org/citations/31545170)). Acts as a key regulator of interstrand cross-link repair, which takes place when both strands of duplex DNA are covalently tethered together, thereby blocking replication and transcription (By similarity). Controls the choice between the two pathways of replication-coupled interstrand-cross-link repair by mediating ubiquitination of MCM7 subunit of the CMG helicase

complex (By similarity). Short ubiquitin chains on MCM7 promote recruitment of DNA glycosylase NEIL3 (By similarity). If the interstrand cross-link cannot be cleaved by NEIL3, the ubiquitin chains continue to grow on MCM7, promoting the unloading of the CMG helicase complex by the VCP/p97 ATPase, enabling the Fanconi anemia DNA repair pathway (By similarity). Only catalyzes ubiquitination of MCM7 when forks converge (By similarity). Also involved in the repair of covalent DNA-protein cross-links (DPCs) during DNA synthesis: promotes ubiquitination of DPCs, leading to their degradation by the proteasome (By similarity). Has also been proposed to play a role in promoting translesion synthesis by mediating the assembly of 'Lys-63'-linked poly-ubiquitin chains on the Y-family polymerase POLN in order to facilitate bypass of DNA lesions and preserve genomic integrity (PubMed:24553286). The function in translesion synthesis is however controversial (PubMed:26595769). Acts as a regulator of the spindle assembly checkpoint (PubMed:25335891). Also acts as a negative regulator of innate immune signaling by inhibiting activation of NF-kappa-B mediated by TNF (PubMed:22945920). Negatively regulates TLR3/4- and RIG-I-mediated IRF3 activation and subsequent IFNB1 production and cellular antiviral response by promoting 'Lys-48'-linked polyubiquitination of TNK1 leading to its proteasomal degradation (PubMed:22945920).

Cellular Location

Nucleus, nucleoplasm. Nucleus, nucleolus. Chromosome. Cytoplasm Cytoplasm, perinuclear region. Note=In the nucleus, found in close proximity to PCNA, suggesting localization at replication foci (PubMed:26595769). Localizes to DNA damage sites in response to replication stress (PubMed:26595769, PubMed:26711499, PubMed:26781088).

TRAIP Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

TRAIP Antibody (C-term) Blocking Peptide - Images

TRAIP Antibody (C-term) Blocking Peptide - Background

TRAIP is a protein that contains an N-terminal RING finger motif and a putative coiled-coil domain. A similar murine protein interacts with TNFR-associated factor 1 (TRAF1), TNFR-associated factor 2 (TRAF2), and cylindromatosis. The interaction with TRAF2 inhibits TRAF2-mediated nuclear factor kappa-B, subunit 1 activation that is required for cell activation and protection against apoptosis.

TRAIP Antibody (C-term) Blocking Peptide - References

Wu,C., Proteomics 7 (11), 1775-1785 (2007)Regamey,A., J. Exp. Med. 198 (12), 1959-1964 (2003)