

UBE3A Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14799a**Specification**

UBE3A Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q05086](#)**UBE3A Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 7337**Other Names**

Ubiquitin-protein ligase E3A, 632-, E6AP ubiquitin-protein ligase, Human papillomavirus E6-associated protein, Oncogenic protein-associated protein E6-AP, Renal carcinoma antigen NY-REN-54, UBE3A, E6AP, EPVE6AP, HPVE6A

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.

UBE3A Antibody (N-term) Blocking Peptide - Protein Information**Name** UBE3A ([HGNC:12496](#))**Function**

E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and transfers it to its substrates (PubMed:10373495, PubMed:16772533, PubMed:19204938, PubMed:19233847, PubMed:19325566, PubMed:19591933, PubMed:22645313, PubMed:24273172, PubMed:24728990, PubMed:30020076). Several substrates have been identified including the BMAL1, ARC, LAMTOR1, RAD23A and RAD23B, MCM7 (which is involved in DNA replication), annexin A1, the PML tumor suppressor, and the cell cycle regulator CDKN1B (PubMed:10373495, PubMed:19204938).

target="_blank">19204938, PubMed:19325566, PubMed:19591933, PubMed:22645313, PubMed:24728990, PubMed:30020076). Additionally, may function as a cellular quality control ubiquitin ligase by helping the degradation of the cytoplasmic misfolded proteins (PubMed:19233847). Finally, UBE3A also promotes its own degradation in vivo. Plays an important role in the regulation of the circadian clock: involved in the ubiquitination of the core clock component BMAL1, leading to its proteasomal degradation (PubMed:24728990). Acts as transcriptional coactivator of progesterone receptor PGR upon progesterone hormone activation (PubMed:16772533). Acts as a regulator of synaptic development by mediating ubiquitination and degradation of ARC (By similarity). Required for synaptic remodeling in neurons by mediating ubiquitination and degradation of LAMTOR1, thereby limiting mTORC1 signaling and activity-dependent synaptic remodeling (By similarity). Synergizes with WBP2 in enhancing PGR activity (PubMed:16772533).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:O08759}. Nucleus {ECO:0000250|UniProtKB:O08759}

UBE3A Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

UBE3A Antibody (N-term) Blocking Peptide - Images

UBE3A Antibody (N-term) Blocking Peptide - Background

This gene encodes an E3 ubiquitin-protein ligase, part of the ubiquitin protein degradation system. This imprinted gene is maternally expressed in brain and biallelically expressed in other tissues. Maternally inherited deletion of this gene causes Angelman Syndrome, characterized by severe motor and intellectual retardation, ataxia, hypotonia, epilepsy, absence of speech, and characteristic facies. The protein also interacts with the E6 protein of human papillomavirus types 16 and 18, resulting in ubiquitination and proteolysis of tumor protein p53. Alternative splicing of this gene results in three transcript variants encoding three isoforms with different N-termini. Additional transcript variants have been described, but their full length nature has not been determined.

UBE3A Antibody (N-term) Blocking Peptide - References

Peters, S.U., et al. Am. J. Med. Genet. A 152A (8), 1994-2001 (2010) :Wang, H., et al. J. Biol. Chem. 285(17):13201-13210(2010) Zaaroor-Regev, D., et al. Proc. Natl. Acad. Sci. U.S.A. 107(15):6788-6793(2010) Sanduja, S., et al. Aging (Albany NY) 1(9):803-817(2009) Matsuoka, S., et al. Science 316(5828):1160-1166(2007)