

**UBA1 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP14555a****Specification**

---

**UBA1 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P22314](#)**UBA1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 7317**Other Names**

Ubiquitin-like modifier-activating enzyme 1, Protein A1S9, Ubiquitin-activating enzyme E1, UBA1, A1S9T, UBE1

**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.

**UBA1 Antibody (N-term) Blocking Peptide - Protein Information****Name** UBA1**Synonyms** A1S9T, UBE1**Function**

Catalyzes the first step in ubiquitin conjugation to mark cellular proteins for degradation through the ubiquitin-proteasome system (PubMed:<a href="http://www.uniprot.org/citations/1606621" target="\_blank">1606621</a>, PubMed:<a href="http://www.uniprot.org/citations/1447181" target="\_blank">1447181</a>, PubMed:<a href="http://www.uniprot.org/citations/33108101" target="\_blank">33108101</a>). Activates ubiquitin by first adenylating its C-terminal glycine residue with ATP, and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding a ubiquitin-E1 thioester and free AMP (PubMed:<a href="http://www.uniprot.org/citations/1447181" target="\_blank">1447181</a>). Essential for the formation of radiation-induced foci, timely DNA repair and for response to replication stress. Promotes the recruitment of TP53BP1 and BRCA1 at DNA damage sites (PubMed:<a href="http://www.uniprot.org/citations/22456334" target="\_blank">22456334</a>).

**Cellular Location**

Cytoplasm. Mitochondrion. Nucleus [Isoform 2]: Cytoplasm

**Tissue Location**

Detected in erythrocytes (at protein level). Ubiquitous.

**UBA1 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**UBA1 Antibody (N-term) Blocking Peptide - Images****UBA1 Antibody (N-term) Blocking Peptide - Background**

The protein encoded by this gene catalyzes the first step in ubiquitin conjugation to mark cellular proteins for degradation. This gene complements an X-linked mouse temperature-sensitive defect in DNA synthesis, and thus may function in DNA repair. It is part of a gene cluster on chromosome Xp11.23. Alternatively spliced transcript variants that encode the same protein have been described.

**UBA1 Antibody (N-term) Blocking Peptide - References**

Burkhardt, J., et al. J. Rheumatol. 36(10):2149-2157(2009) Su, Z.L., et al. Leuk. Lymphoma 49(9):1821-1822(2008) Ramser, J., et al. Am. J. Hum. Genet. 82(1):188-193(2008) Carbia-Nagashima, A., et al. Cell 131(2):309-323(2007) Jin, J., et al. Nature 447(7148):1135-1138(2007)