

**UBA1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14555a**

**Specification**

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**UBA1 Antibody (N-term) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P22314</a>
Other Accession	<a href="#">Q5U300</a> , <a href="#">Q29504</a> , <a href="#">Q02053</a> , <a href="#">A3KMV5</a> , <a href="#">NP_695012.1</a> , <a href="#">NP_003325.2</a>
Reactivity	<b>Human</b>
Predicted	<b>Bovine, Mouse, Rabbit, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>117849</b>
Antigen Region	<b>1-30</b>

**UBA1 Antibody (N-term) - Additional Information**

**Gene ID** 7317

**Other Names**

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

**Target/Specificity**

This UBA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human UBA1.

**Dilution**

WB~~1:1000  
IHC-P~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

UBA1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**UBA1 Antibody (N-term) - 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:[1447181](#), PubMed:[1606621](#), PubMed:[33108101](#)). 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:[1447181](#)). 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:[22456334](#)).

**Cellular Location**

Cytoplasm. Mitochondrion. Nucleus [Isoform 2]: Cytoplasm

**Tissue Location**

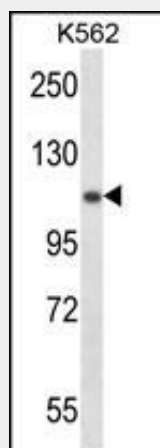
Detected in erythrocytes (at protein level). Ubiquitous.

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

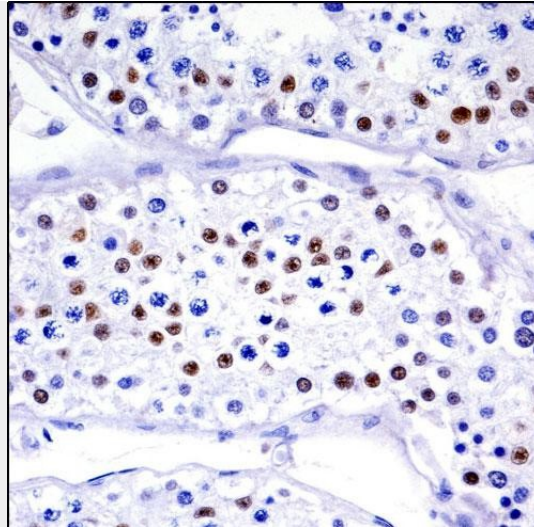
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**UBA1 Antibody (N-term) - Images**



UBA1 Antibody (N-term) (Cat. #AP14555a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the UBA1 antibody detected the UBA1 protein (arrow).



UBA1 Antibody (N-term) (AP14555a) immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of UBA1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **UBA1 Antibody (N-term) - 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) - 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)

#### **UBA1 Antibody (N-term) - Citations**

- [Orthogonal ubiquitin transfer identifies ubiquitination substrates under differential control by the two ubiquitin activating enzymes.](#)