

**E1 Ubiquitin (UBE1) Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2113b**

**Specification**

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**E1 Ubiquitin (UBE1) Antibody (C-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">P22314</a>
Other Accession	<a href="#">Q5U300</a> , <a href="#">Q29504</a> , <a href="#">Q02053</a> , <a href="#">A3KMV5</a>
Reactivity	Human, Mouse
Predicted	Bovine, Rabbit, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1026-1058

**E1 Ubiquitin (UBE1) Antibody (C-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 E1 Ubiquitin (UBE1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1026-1058 amino acids from the C-terminal region of human E1 Ubiquitin (UBE1).

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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**

E1 Ubiquitin (UBE1) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**E1 Ubiquitin (UBE1) Antibody (C-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

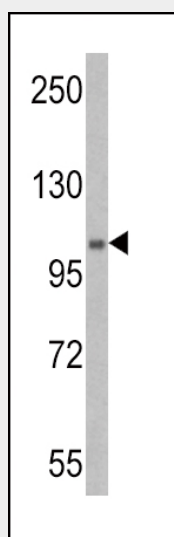
**Tissue Location**

Detected in erythrocytes (at protein level). Ubiquitous.

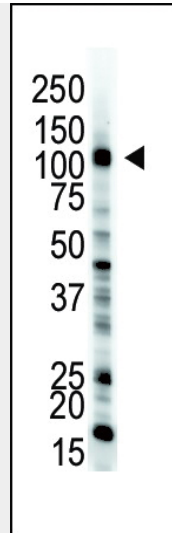
**E1 Ubiquitin (UBE1) Antibody (C-term) - Protocols**

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

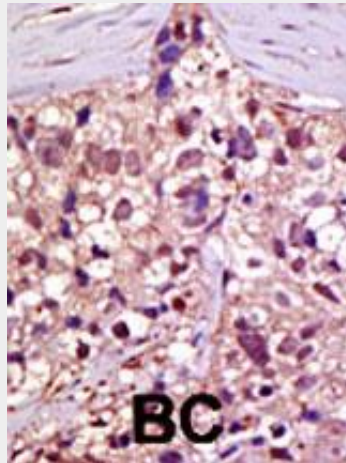
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**E1 Ubiquitin (UBE1) Antibody (C-term) - Images**

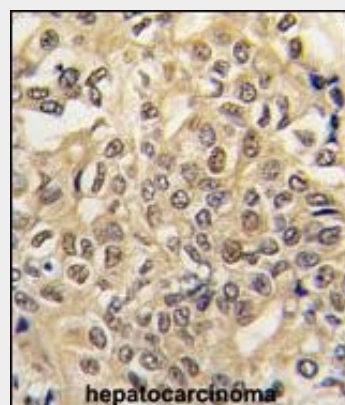
Western blot analysis of E1 Ubiquitin (UBE1) Antibody (C-term) (Cat. #AP2113b) in mouse stomach tissue lysates (35ug/lane). UBE1 (arrow) was detected using the purified Pab.



The anti-UBE1 Pab (Cat. #AP2113b) is used in Western blot to detect UBE1 in HL-60 cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with UBE1 antibody (C-term) (Cat.#AP2113b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

### **E1 Ubiquitin (UBE1) Antibody (C-term) - Background**

UBE1 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. Alternative splicing results in 2 transcript variants encoding the same protein, but with different 5' UTR.

### **E1 Ubiquitin (UBE1) Antibody (C-term) - References**

Ayusawa, D., et al., Cell Struct. Funct. 17(2):113-122 (1992). Handley, P.M., et al., Proc. Natl. Acad. Sci. U.S.A. 88(1):258-262 (1991). Kudo, M., et al., Exp. Cell Res. 192(1):110-117 (1991). Zacksenhaus, E., et al., Cytogenet. Cell Genet. 53(1):20-22 (1990). Zacksenhaus, E., et al., EMBO J. 9(9):2923-2929 (1990).