

E1 Ubiquitin Activating Enzyme Antibody Rabbit mAb Catalog # AP91770

## **Specification**

# E1 Ubiquitin Activating Enzyme Antibody - Product Information

ApplicationWB, IHC, FC, ICCPrimary AccessionP22314ReactivityRatClonalityMonoclonalOther NamesA1S9; A1S9T; A1ST; AMCX1; CFAP124; GXP1; POC20; SMAX2; Uba1; UBA1A; UBE1; UBE1X;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	<b>117849 Da</b>

### E1 Ubiquitin Activating Enzyme Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human E1 Ubiquitin Activating Enzyme
Description	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 an ubiquitin-E1 thioester and free AMP.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### E1 Ubiquitin Activating Enzyme Antibody - 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/1447181" target="\_blank">1447181</a>, PubMed:<a href="http://www.uniprot.org/citations/1606621" target="\_blank">1606621</a>, PubMed:<a href="http://www.uniprot.org/citations/3108101" 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>).

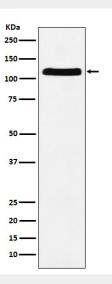
**Cellular Location** Cytoplasm. Mitochondrion. Nucleus [Isoform 2]: Cytoplasm

**Tissue Location** Detected in erythrocytes (at protein level). Ubiquitous.

# E1 Ubiquitin Activating Enzyme Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- E1 Ubiquitin Activating Enzyme Antibody Images



Western blot analysis of E1 Ubiquitin Activating Enzyme expression in HeLa cell lysate.