

# Anti-E1 Ubiquitin Activating Enzyme Rabbit Monoclonal Antibody

Catalog # ABO15316

### Specification

## Anti-E1 Ubiquitin Activating Enzyme Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format Description WB, IHC, IF, ICC, FC <u>P22314</u> Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-E1 Ubiquitin Activating Enzyme Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

# Anti-E1 Ubiquitin Activating Enzyme Rabbit Monoclonal Antibody - Additional Information

Gene ID 7317

**Other Names** Ubiquitin-like modifier-activating enzyme 1, 6.2.1.45, Protein A1S9, Ubiquitin-activating enzyme E1, UBA1, A1S9T, UBE1

Calculated MW 118 kDa KDa

Application Details WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>FC 1:50

**Contents** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human E1 Ubiquitin Activating Enzyme

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

### Anti-E1 Ubiquitin Activating Enzyme Rabbit Monoclonal 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/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

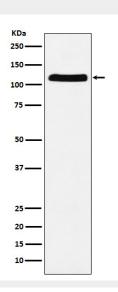
**Tissue Location** Detected in erythrocytes (at protein level). Ubiquitous.

### Anti-E1 Ubiquitin Activating Enzyme Rabbit Monoclonal 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>

### Anti-E1 Ubiquitin Activating Enzyme Rabbit Monoclonal Antibody - Images





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