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E1 Ubiquitin Activating Enzyme Antibody

Rabbit mAb
Catalog # AP91770

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	P22314
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	A1S9; A1S9T; A1ST; AMCX1; CFAP124; GXP1; POC20; SMAX2; Uba1; UBA1A; UBE1; UBE1X;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	117849

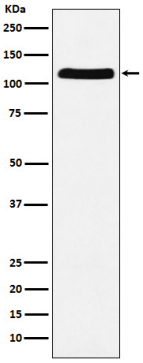
Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50
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.

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.

Images



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