

# UBA1 Polyclonal Antibody

Catalog # AP73676

## **Product Information**

Application	WB
Primary Accession	<u>P22314</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	117849

#### **Additional Information**

Gene ID	7317
Other Names	UBA1; A1S9T; UBE1; Ubiquitin-like modifier-activating enzyme 1; Protein A1S9; Ubiquitin-activating enzyme E1
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

### **Protein Information**

Background

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: <u>1447181</u> , PubMed: <u>1606621</u> , PubMed: <u>33108101</u> ). 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: <u>1447181</u> ). 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: <u>22456334</u> ).
Cellular Location	Cytoplasm. Mitochondrion. Nucleus [Isoform 2]: Cytoplasm
Tissue Location	Detected in erythrocytes (at protein level). Ubiquitous.

Catalyzes the first step in ubiquitin conjugation to mark cellular proteins for degradation through the ubiquitin- proteasome system (PubMed:<u>1606621</u>, PubMed:<u>1447181</u>). 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:<u>1447181</u>). 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:<u>22456334</u>).

#### Images



Western Blot analysis of PC12 cells using UBA1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.