10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

UBA1 Polyclonal Antibody

Catalog # AP73676

Product Information

Application	WB
Primary Accession	P22314
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℃

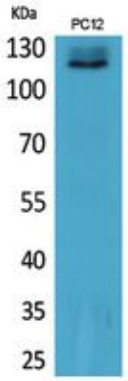
Protein Information

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.

Background

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

Images



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