

## **UBA1** Polyclonal Antibody

Catalog # AP73676

## **Specification**

## **UBA1 Polyclonal Antibody - Product Information**

Application WB
Primary Accession P22314

Reactivity Human, Mouse, Rat Host Rabbit

Clonality Rappit
Polyclonal

## **UBA1** Polyclonal Antibody - 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

### **UBA1** Polyclonal 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** 

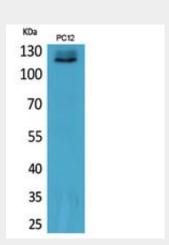
Detected in erythrocytes (at protein level). Ubiquitous.

# **UBA1** Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **UBA1 Polyclonal Antibody - Images**



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

### **UBA1 Polyclonal Antibody - 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).