

# UBA7 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51596

## **Product Information**

Application	WB
Primary Accession	<u>P41226</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	111694

#### **Additional Information**

Gene ID	7318
Other Names	Ubiquitin-like modifier-activating enzyme 7, Ubiquitin-activating enzyme 7, D8, Ubiquitin-activating enzyme E1 homolog, UBA7, UBE1L, UBE2
Target/Specificity	KLH conjugated synthetic peptide derived from human UBA7
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## **Protein Information**

Name	UBA7 {ECO:0000303 PubMed:28397838, ECO:0000312 HGNC:HGNC:12471}
Function	E1-activating enzyme that catalyzes the covalent conjugation of the ubiquitin-like protein product of ISG15 to additional interferon stimulated proteins (ISGs) as well as other cellular proteins such as P53 in a process termed protein ISGylation (PubMed: <u>27545325</u> ). Plays an essential role in antiviral immunity together with ISG15 by restricting the replication of many viruses including rabies virus, influenza virus, sindbis virus, rotavirus or human cytomegalovirus (PubMed: <u>16254333</u> , PubMed: <u>19073728</u> , PubMed: <u>29056542</u> , PubMed: <u>29743376</u> , PubMed: <u>37722521</u> ). For example, ISG15 modification of influenza A protein NS1 disrupts the association of the NS1 with importin-alpha leading to NS1 nuclear import inhibition (PubMed: <u>20133869</u> ). ISGylation of human cytomegalovirs protein UL26 regulates its stability and inhibits its activities to suppress NF-kappa-B signaling (PubMed: <u>27564865</u> ).
Cellular Location	Cytoplasm. Nucleus

## Background

Activates ubiquitin by first adenylating with ATP its C- terminal glycine residue and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding an ubiquitin- E1 thioester and free AMP. Catalyzes the ISGylation of influenza A virus NS1 protein.

#### References

Kok K.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:6071-6075(1993). Kok K.,et al.Gene Expr. 4:163-175(1995). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Gevaert K.,et al.Nat. Biotechnol. 21:566-569(2003).

#### Images



Anti-UBA7 Antibodyat 1:1000 dilution + Hela whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 112 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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