

UBA1 Antibody (R32017)

Catalog No.	Formulation	Size
R32017	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P22314
Localization	Nuclear
Applications	Western Blot : 0.1-0.5ug/ml
Limitations	This UBA1 antibody is available for research use only.



Western blot testing of 1) rat liver, 2) mouse liver, 3) mouse testis and 4) human HeLa lysate with UBA1 antibody. Expected molecular weight: ~118/114 kDa (isoforms a/b).

Description

Ubiquitin-like modifier activating enzyme 1 (UBA1) is an enzyme which in humans is encoded by the UBA1 gene. The protein encoded by this gene catalyzes the first step in ubiquitin conjugation, or ubiquitination, to mark cellular proteins for degradation. Specifically, UBA1 catalyzes the ATP-dependent adenylation of ubiquitin (Ub), thereby forming a thioester bond between the two. It also continues to participate in subsequent steps of ubiquitination as a Ub carrier. UBA1 is one of only two human ubiquitin-activating enzymes (E1), the other being UBA6, and thus is largely responsible for protein ubiquitination in humans. Through its central role in ubiquitination, UBA1 has been linked to cell cycle regulation, endocytosis, signal transduction, apoptosis, DNA damage repair, and transcriptional regulation. Additionally, UBE1 helps

regulate the NEDD8 pathway, thus implicating it in protein folding, as well as mitigating the depletion of ubiquitin levels during stress.

Application Notes

Optimal dilution of the UBA1 antibody should be determined by the researcher.

Immunogen

Amino acids HDQGTAQWADLSSQFYLR EEDIGKNRAEVSQPRLAELN of human UBA1 were used as the immunogen for the UBA1 antibody.

Storage

After reconstitution, the UBA1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.