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

Anti-UBE2A/B Antibody

Catalog # AP53708

Product Information

Application	WB, IF/IC
Primary Accession	P49459
Other Accession	P63146
Reactivity	Human, Mouse, Rat, Zebrafish, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17315

Additional Information

Gene ID	7319
Other Names	UBE2A; RAD6A; Ubiquitin-conjugating enzyme E2 A; RAD6 homolog A; HR6A; hHR6A; Ubiquitin carrier protein A; Ubiquitin-protein ligase A; UBE2B; RAD6B; Ubiquitin-conjugating enzyme E2 B; RAD6 homolog B; HR6B; hHR6B; Ubiquitin carrier protein B; Ubiquitin-conjugating enzyme E2-17 kDa; Ubiquitin-protein ligase B
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human UBE2A/B. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

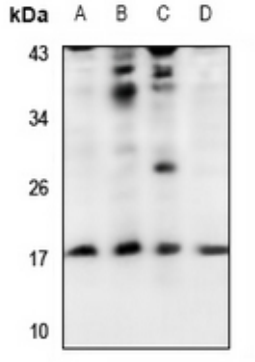
Protein Information

Name	UBE2A {ECO:0000303|PubMed:23685073, ECO:0000312|HGNC:HGNC:12472}
Function	E2 ubiquitin-conjugating enzyme that accepts ubiquitin from the ubiquitin-activating enzyme E1 and transfers it to a E3 ubiquitin- protein ligase (PubMed:16337599, PubMed:20061386, PubMed:23685073, PubMed:25582440, PubMed:38297121). In vitro catalyzes 'Lys-11', as well as 'Lys-48'-linked polyubiquitination (PubMed:20061386). Together with the E3 enzyme BRE1 (RNF20 and/or RNF40), plays a role in transcription regulation by catalyzing the monoubiquitination of histone H2B at 'Lys- 120' to form H2BK120ub1 (PubMed:16337599). H2BK120ub1 gives a specific tag for epigenetic transcriptional activation, elongation by RNA polymerase II, telomeric silencing, and is also a prerequisite for H3K4me and H3K79me

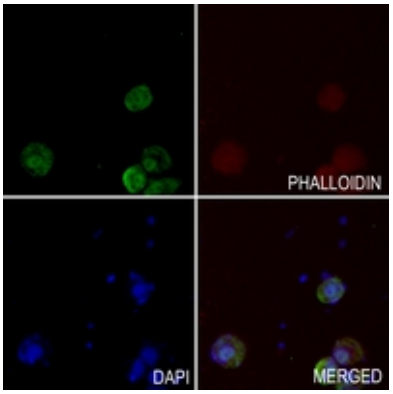
formation (PubMed:16337599). Involved in mitophagy by acting as a E2 ubiquitin-conjugating enzyme for PRKN (PubMed:23685073). In association with the E3 enzyme UBR4, is involved in N-end rule-dependent protein degradation (PubMed:38182926). In association with the E3 ubiquitin-protein ligase complex SIFI, inhibits the mitochondrial stress response by acting as a E2 ubiquitin- conjugating enzyme for UBR4 and KCMF1 (PubMed:38297121).

Cellular Location Late endosome. Lysosome

Images



Western blot analysis of UBE2A/B expression in MCF7 (A), A549 (B), C6 (C), MEF (D) whole cell lysates. (Predicted band size: 17 kD; Observed band size: 17 kD)



Immunofluorescent analysis of UBE2A/B staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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