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UBE1C Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1063b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q8TBC4
Other Accession	Q99MI7, Q8C878, Q7ZVX6
Reactivity	Human, Mouse
Predicted	Zebrafish, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB2803
Calculated MW	51852
Antigen Region	415-445

Additional Information

Gene ID	9039
Other Names	NEDD8-activating enzyme E1 catalytic subunit, 632-, NEDD8-activating enzyme E1C, Ubiquitin-activating enzyme E1C, Ubiquitin-like modifier-activating enzyme 3, Ubiquitin-activating enzyme 3, UBA3, UBE1C
Target/Specificity	This UBE1C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 415-445 amino acids from the C-terminal region of human UBE1C.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	UBE1C Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	UBA3
Synonyms	UBE1C

Function	Catalytic subunit of the dimeric UBA3-NAE1 E1 enzyme. E1 activates NEDD8 by first adenylating its C-terminal glycine residue with ATP, thereafter linking this residue to the side chain of the catalytic cysteine, yielding a NEDD8-UBA3 thioester and free AMP. E1 finally transfers NEDD8 to the catalytic cysteine of UBE2M. Down- regulates steroid receptor activity. Necessary for cell cycle progression.
Tissue Location	Ubiquitously expressed.

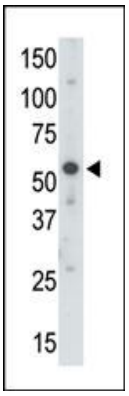
Background

The modification of proteins with ubiquitin is an important cellular mechanism for targeting abnormal or short-lived proteins for degradation. Ubiquitination involves at least three classes of enzymes: ubiquitin-activating enzymes, or E1s, ubiquitin-conjugating enzymes, or E2s, and ubiquitin-protein ligases, or E3s. This gene encodes a member of the E1 ubiquitin-activating enzyme family. The encoded enzyme associates with AppBp1, an amyloid beta precursor protein binding protein, to form a heterodimer, and then the enzyme complex activates NEDD8, a ubiquitin-like protein, which regulates cell division, signaling and embryogenesis. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.

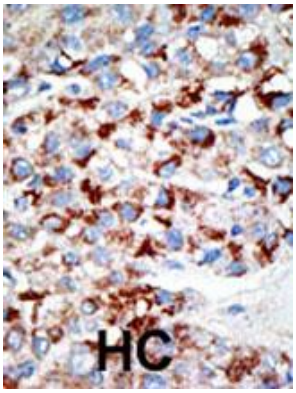
References

Bohnsack, R.N., et al., J. Biol. Chem. 278(29):26823-26830 (2003).
Walden, H., et al., Nature 422(6929):330-334 (2003).
Gong, L., et al., J. Biol. Chem. 274(17):12036-12042 (1999).
Gubin, A.N., et al., Genomics 59(2):168-177 (1999).
Osaka, F., et al., Genes Dev. 12(15):2263-2268 (1998).

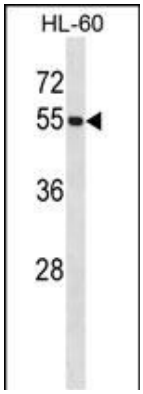
Images



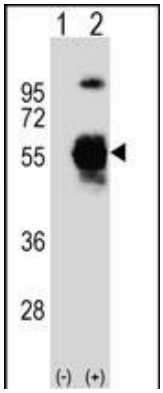
The anti-UBE1 C-term Pab (Cat. #AP1063b) is used in Western blot to detect UBE1 in mouse brain tissue lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



UBE1C Antibody (S430) (Cat. #AP1063b) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the UBE1C antibody detected the UBE1C protein (arrow).



Western blot analysis of UBE1C (arrow) using rabbit polyclonal UBE1C Antibody (S430) (Cat. #AP1063b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the UBE1C gene.

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