

UBE2D1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2112b

Product Information

Application	IHC-P, WB, E
Primary Accession	<u>P51668</u>
Other Accession	<u>D3ZDK2, P61080, Q2TA10, NP_003329</u>
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB04139
Calculated MW	16602
Antigen Region	111-140

Additional Information

Gene ID	7321
Other Names	Ubiquitin-conjugating enzyme E2 D1, Stimulator of Fe transport, SFT, UBC4/5 homolog, UbcH5, Ubiquitin carrier protein D1, Ubiquitin-conjugating enzyme E2(17)KB 1, Ubiquitin-conjugating enzyme E2-17 kDa 1, Ubiquitin-protein ligase D1, UBE2D1, SFT, UBC5A, UBCH5, UBCH5A
Target/Specificity	This UBE2D1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 111-140 amino acids from the C-terminal region of human UBE2D1.
Dilution	IHC-P~~1:100~500 WB~~1:1000 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	UBE2D1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name

Synonyms	SFT, UBC5A, UBCH5, UBCH5A
Function	Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins (PubMed:22496338). In vitro catalyzes 'Lys-48'-linked polyubiquitination (PubMed:20061386). Mediates the selective degradation of short-lived and abnormal proteins. Functions in the E6/E6-AP-induced ubiquitination of p53/TP53. Mediates ubiquitination of PEX5 and auto-ubiquitination of STUB1, TRAF6 and TRIM63/MURF1 (PubMed:18042044, PubMed:18359941). Ubiquitinates STUB1-associated HSP90AB1 in vitro (PubMed:18042044). Lacks inherent specificity for any particular lysine residue of ubiquitin (PubMed:18042044). Essential for viral activation of IRF3 (PubMed:19854139). Mediates polyubiquitination of CYP3A4 (PubMed:19103148).
Cellular Location	Cytoplasm.
Tissue Location	Ubiquitous. Up-regulated in livers of iron- overloaded patients with hereditary hemochromatosis

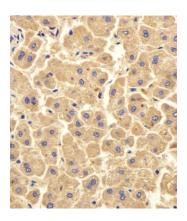
Background

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. UBE2D1 is a member of the E2 ubiquitin-conjugating enzyme family. This enzyme is closely related to a stimulator of iron transport (SFT), and is up-regulated in hereditary hemochromatosis. It also functions in the ubiquitination of the tumor-suppressor protein p53 and the hypoxia-inducible transcription factor HIF1alpha by interacting with the E1 ubiquitin-activating enzyme and the E3 ubiquitin-protein ligases.

References

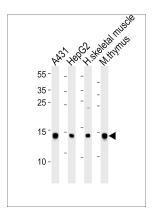
Bres, V., et al., Nat. Cell Biol. 5(8):754-761 (2003). Gehrke, S.G., et al., Blood 101(8):3288-3293 (2003). Kamura, T., et al., Proc. Natl. Acad. Sci. U.S.A. 97(19):10430-10435 (2000). Gutierrez, J.A., et al., Biochem. Biophys. Res. Commun. 253(3):739-742 (1998). Jensen, J.P., et al., J. Biol. Chem. 270(51):30408-30414 (1995).

Images

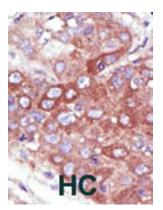


Immunohistochemical analysis of paraffin-embedded H. liver section using UBE2D1 Antibody (C-term)(Cat#AP2112b). AP2112b was diluted at 1:100 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

Western blot analysis of lysates from A431, HepG2 cell line, human skeletal muscle and mouse thymus tissue lysate(from left to right), using hUBE2D1-I126(Cat. #AP2112B). AP2112B was diluted at 1:1000 at each lane.



A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



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.

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