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UBE2D1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5141

Product Information

Application	IHC-P, WB
Primary Accession	P51668
Other Accession	D3ZDK2, P61080, Q2TA10, NP_003329
Reactivity	Human, Mouse
Predicted	Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	16602
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	7321
Antigen Region	111-140
Other Names	UBE2D1; SFT; UBC5A; UBCH5; UBCH5A; Ubiquitin-conjugating enzyme E2 D1; Stimulator of Fe transport; 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
Dilution	IHC-P~~1:100 WB~~1:1000
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.
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	UBE2D1

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

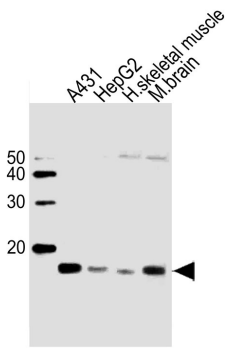
Background

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

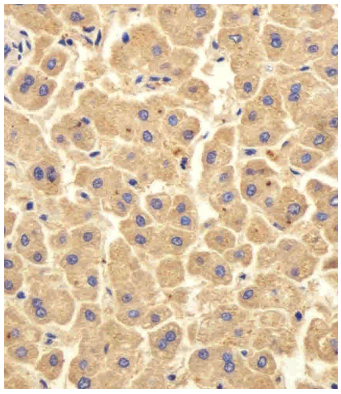
Bres, V., et al., Nat. Cell Biol. 5(8):754-761 (2003).
Gehrke, S.G., et al., Blood 101(8):3288-3293 (2003).
Kamura, T., et al., Proc. Natl. Acad. Sci. U.S.A. 97(19):10430-10435 (2000).
Gutierrez, J.A., et al., Biochem. Biophys. Res. Commun. 253(3):739-742 (1998).
Jensen, J.P., et al., J. Biol. Chem.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

Images



Western blot analysis of lysates from A431,HepG2 cell line,human skeletal muscle,mouse brain tissue lysate (from left to right), using UBE2D1 Antibody (I126)(Cat. #AW5141). AW5141 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 20ug per lane.

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.