

# **UBE2D1** Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2112b

#### **Product Information**

**Application** IHC-P, WB, E **Primary Accession** P51668

Other Accession <u>D3ZDK2</u>, <u>P61080</u>, <u>Q2TA10</u>, <u>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 UBE2D1

**Synonyms** SFT, UBC5A, UBCH5, UBCH5A

**Function** Accepts ubiquitin from the E1 complex and catalyzes its covalent

attachment to other proteins (PubMed:<u>22496338</u>). In vitro catalyzes

'Lys-48'-linked polyubiquitination (PubMed:  $\underline{20061386}$ ). 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

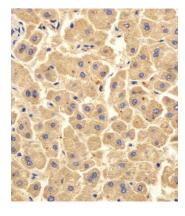
## **Background**

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

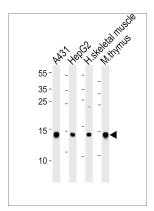
Bres, V., et al., Nat. Cell Biol. 5(8):754-761 (2003). Gehrke, S.G., et al., Blood 101(8):3288-3293 (2003). Kamura, T., et al., Proc. Natl. Acad. Sci. U.S.A. 97(19):10430-10435 (2000). Gutierrez, J.A., et al., Biochem. Biophys. Res. Commun. 253(3):739-742 (1998). Jensen, J.P., et al., J. Biol. Chem.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

# **Images**

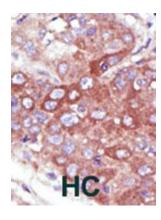


Immunohistochemical analysis of paraffin-embedded H. liver section using UBE2D1 Antibody (C-term)(Cat#AP2112b). AP2112b was diluted at 1:100 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

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'.