

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

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2112b

# **Specification**

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

Predicted Bovine, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 16602
Antigen Region 111-140

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

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

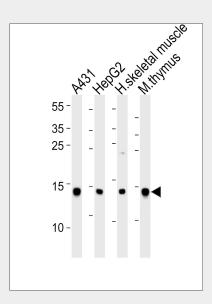
Ubiquitous. Up-regulated in livers of iron- overloaded patients with hereditary hemochromatosis

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

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

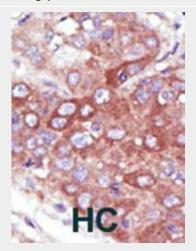
## **UBE2D1** Antibody (C-term) - Images



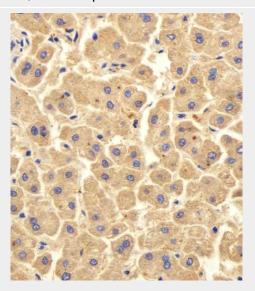
Western blot analysis of lysates from A431, HepG2 cell line, human skeletal muscle and mouse thymus tissue lysate(from left to right), using hUBE2D1-I126(Cat. #AP2112B). AP2112B was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as



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.



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.

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

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