

# **USP20 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2146b

## **Specification**

#### USP20 Antibody (C-term) - Product Information

Application WB, IHC-P,E
Primary Accession O9Y2K6

Other Accession A7Z056, NP 006667

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Mouse
Bovine
Rabbit
Polyclonal
Rabbit Ig
102003
814-844

USP20 Antibody (C-term) - Additional Information

## **Gene ID** 10868

### **Other Names**

Ubiquitin carboxyl-terminal hydrolase 20, Deubiquitinating enzyme 20, Ubiquitin thioesterase 20,

Ubiquitin-specific-processing protease 20, VHL-interacting deubiquitinating enzyme 2, hVDU2, USP20, KIAA1003, LSFR3A, VDU2

### **Target/Specificity**

This USP20 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 814-844 amino acids from the C-terminal region of human USP20.

## **Dilution**

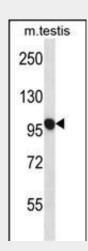
WB~~1:1000 IHC-P~~1:10~50

### **Format**

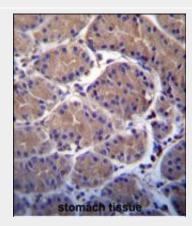
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

# 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

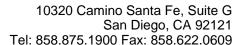


USP20 Antibody (E828) (Cat. #AP2146b) western blot analysis in mouse testis tissue lysates (35ug/lane). This demonstrates the USP20 antibody detected the USP20 protein (arrow).



USP20 Antibody (C-term) (Cat. #AP2146b)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of USP20 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

**USP20 Antibody (C-term) - Background** 





cycles.

### **Precautions**

USP20 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

USP20 Antibody (C-term) - Protein Information

Name USP20

Synonyms KIAA1003, LSFR3A, VDU2

#### **Function**

Deubiquitinating enzyme involved in beta-2 adrenergic receptor (ADRB2) recycling. Acts as a regulator of G-protein coupled receptor (GPCR) signaling by mediating the deubiquitination beta-2 adrenergic receptor (ADRB2). Plays a central role in ADRB2 recycling and resensitization after prolonged agonist stimulation by constitutively binding ADRB2, mediating deubiquitination of ADRB2 and inhibiting lysosomal trafficking of ADRB2. Upon dissociation, it is probably transferred to the translocated beta-arrestins, possibly leading to beta-arrestins deubiquitination and disengagement from ADRB2. This suggests the existence of a dynamic exchange between the ADRB2 and beta-arrestins. Deubiquitinates DIO2, thereby regulating thyroid hormone regulation. Deubiquitinates HIF1A, leading to stabilize HIF1A and enhance HIF1A-mediated activity. Mediates deubiquitination of both 'Lys-48'- and 'Lys-63'-linked polyubiquitin chains.

# **Cellular Location**

Cytoplasm, perinuclear region. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=According to PubMed:12865408, it localizes in the endoplasmic reticulum; however the relevance of such result is unclear

## **USP20 Antibody (C-term) - Protocols**

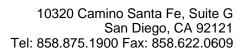
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

Modification of target proteins by ubiquitin participates in a wide array of biological functions. Proteins destined for degradation or processing via the 26 S proteasome are coupled to multiple copies of ubiquitin. However, attachment of ubiquitin or ubiquitin-related molecules may also result in changes in subcellular distribution or modification of protein activity. An additional level of ubiquitin regulation, deubiquitination, is catalyzed by proteases called deubiquitinating enzymes, which fall into four distinct families. Ubiquitin C-terminal hydrolases, ubiquitin-specific processing proteases (USPs),1 OTU-domain ubiquitin-aldehyde-binding proteins, and Jab1/Pad1/MPN-domain-containing metallo-enzymes. Among these four families, USPs represent the most widespread and represented deubiquitinating enzymes across evolution. USPs tend to release ubiquitin from a conjugated protein. They display similar catalytic domains containing conserved Cys and His boxes but divergent N-terminal and occasionally C-terminal extensions, which are thought to function in substrate recognition, subcellular localization, and protein-protein interactions.

## **USP20 Antibody (C-term) - References**

Nagase, T., et al., DNA Res. 6(1):63-70 (1999). Gilley, J., et al., Hum. Mol. Genet. 8(7):1313-1320 (1999).





- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture