

# **USP21 Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2041a

# **Specification**

# **USP21** Antibody (Center) - Product Information

Application WB,E
Primary Accession O9UK80

Other Accession <u>B2GUX4</u>, <u>Q9QZL6</u>, <u>Q2KI72</u>

Reactivity Human

Predicted Bovine, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 226-256

## **USP21** Antibody (Center) - Additional Information

### **Gene ID 27005**

### **Other Names**

Ubiquitin carboxyl-terminal hydrolase 21, Deubiquitinating enzyme 21, Ubiquitin thioesterase 21, Ubiquitin-specific-processing protease 21, USP21, USP23

## Target/Specificity

This USP21 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 226-256 amino acids from the Central region of human USP21.

### **Dilution**

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**

USP21 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **USP21** Antibody (Center) - Protein Information

Name USP21 {ECO:0000303|PubMed:10799498, ECO:0000312|HGNC:HGNC:12620}



**Function** Deubiquitinates histone H2A, a specific tag for epigenetic transcriptional repression, thereby acting as a coactivator (By similarity). Deubiquitination of histone H2A releaves the repression of di- and trimethylation of histone H3 at 'Lys-4', resulting in regulation of transcriptional initiation (By similarity). Regulates gene expression via histone H2A deubiquitination (By similarity). Deubiquitinates BAZ2A/TIP5 leading to its stabilization (PubMed:26100909). Also capable of removing NEDD8 from NEDD8 conjugates but has no effect on Sentrin-1 conjugates (PubMed:10799498). Also acts as a negative regulator of the ribosome quality control (RQC) by mediating deubiquitination of 40S ribosomal proteins RPS10/eS10 and RPS20/uS10, thereby antagonizing ZNF598-mediated 40S ubiquitination (PubMed:32011234).

# **Cellular Location** Cytoplasm. Nucleus

### **Tissue Location**

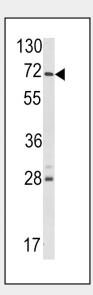
Highly expressed in heart, pancreas and skeletal muscle. Also expressed in brain, placenta, liver and kidney, and at very low level in lung.

## **USP21 Antibody (Center) - Protocols**

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

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

# **USP21 Antibody (Center) - Images**



Western blot analysis of hUSP21-L241 (Cat. #AP2041a) in NCI-H460 cell line lysates (35ug/lane). USP21 (arrow) was detected using the purified Pab.

### **USP21** Antibody (Center) - Background





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USP21 is a ubiquitin-specific protease, an enzyme that removes ubiquitin from ubiquitinated proteins. The encoded protein belongs to the C19 peptidase family, also known as family 2 of ubiquitin carboxyl-terminal hydrolases. This protein has been reported to be capable of removing NEDD8 from NEDD8 conjugates.

# **USP21 Antibody (Center) - References**

Puente, X.S., et al., Nat. Rev. Genet. 4(7):544-558 (2003). Gong, L., et al., J. Biol. Chem. 275(19):14212-14216 (2000). Hillier, L.D., et al., Genome Res. 6(9):807-828 (1996). Smith, T.S., et al., Biochim. Biophys. Acta 1490 (1-2), 184-188 (2000).