

USP21 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2147a

Specification

USP21 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	O9UK80
Other Accession	O2KJ72
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	62656
Antigen Region	406-436

USP21 Antibody (C-term) - 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 406-436 amino acids from the C-terminal region of human USP21.

Dilution

WB~~1:2000
IHC-P~~1:50~100

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

USP21 Antibody (C-term) - 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 releases 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

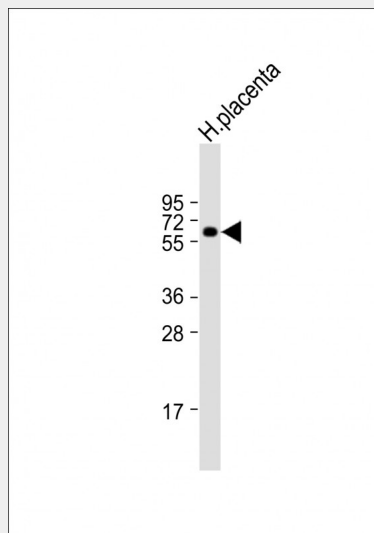
Highly expressed in heart, pancreas and skeletal muscle. Also expressed in brain, placenta, liver and kidney, and at very low level in lung.

USP21 Antibody (C-term) - Protocols

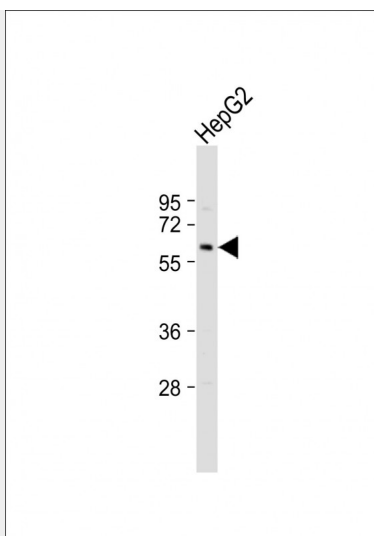
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

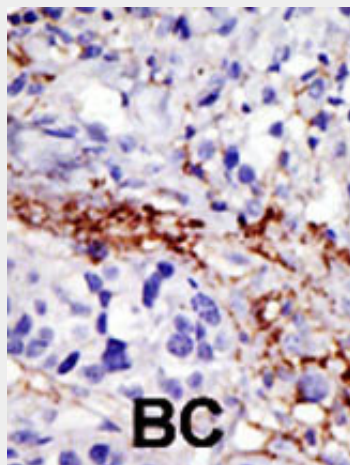
USP21 Antibody (C-term) - Images



Anti-USP21 Antibody (C-term) at 1:1000 dilution + human placenta lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 63 kDa Blocking/Dilution buffer: 5% NFD/MBST.



Anti-hUSP21-N421 at 1:2000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 63 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.

USP21 Antibody (C-term) - Background

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 (C-term) - 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).