

USP21 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1069a

Specification

USP21 Antibody (N-term) - Product Information

Application WB, IHC-P,E Primary Accession O9UK80

Other Accession <u>B2GUX4</u>, <u>Q9OZL6</u>,

Q2KJ72

Reactivity Human

Predicted Bovine, Mouse,

Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit Ig
Antigen Region 1-30

USP21 Antibody (N-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 1-30 amino acids from the N-terminal region of human USP21.

Dilution

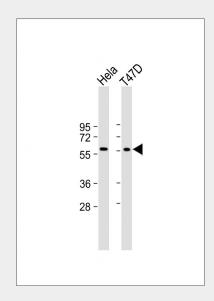
WB~~1:2000 IHC-P~~1:50~100

Format

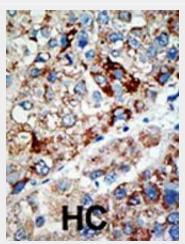
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

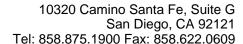
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw



All lanes: Anti-hUSP21-M1 at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: T47D 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 AEC staining. This data demonstrates the use of this antibody for





cycles.

Precautions

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

USP21 Antibody (N-term) - Protein Information

Name USP21

Synonyms USP23

Function

Deubiquitinates histone H2A, a specific tag for epigenetic transcriptional repression, thereby acting as a coactivator. Deubiquitination of histone H2A releaves the repression of di- and trimethylation of histone H3 at 'Lys-4', resulting in regulation of transcriptional initiation. Regulates gene expression via histone H2A deubiquitination (By similarity). Also capable of removing NEDD8 from NEDD8 conjugates but has no effect on Sentrin-1 conjugates (PubMed: 10799498). Deubiquitinates BAZ2A/TIP5 leading to its stabilization (PubMed:26100909).

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 (N-term) - Protocols

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

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

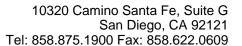
immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

USP21 Antibody (N-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 (N-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).





• Cell Culture

USP21 Antibody (N-term) - Citations

- The deubiquitinase USP21 maintains the stemness of mouse embryonic stem cells via stabilization of Nanog.
- Deubiquitination and stabilization of IL-33 by USP21.
- <u>Identification of the E3 deubiquitinase ubiquitin-specific peptidase 21 (USP21) as a positive regulator of the transcription factor GATA3.</u>