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USP21 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2041a

Product Information

Application	WB, E
Primary Accession	Q9UK80
Other Accession	B2GUX4, Q9QZL6, Q2KJ72
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB2871
Calculated MW	62656
Antigen Region	226-256

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.

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.

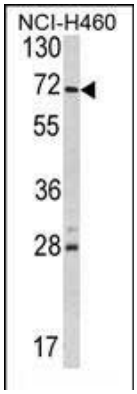
Background

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.

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).

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.