USP21 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	USP21, Polyclonal Antibody
Full Product Name	USP21 Antibody
Product Gene Name	anti-USP21 antibody
Product Synonym Names	Deubiquitinating enzyme 21; deubiquitinating enzyme 23; EC 3.1.2.15; ESTM28; MGC3394; NEDD8-specific protease; Ubiquitin carboxyl terminal hydrolase 21; ubiquitin carboxyl terminal hydrolase 23; Ubiquitin carboxyl-terminal hydrolase 21; ubiquitin specific peptidase 21; Ubiquitin specific processing protease 21; ubiquitin specific protease 16; ubiquitin specific protease 21; ubiquitin specific protease 23; Ubiquitin thioesterase 21; Ubiquitin thiolesterase 21; ubiquitin thiolesterase 23; ubiquitin-specific protease 23, formerly; Ubiquitin-specific-processing protease 21; UBP21_HUMAN; USP16; Usp21; USP23; USP23, formerly; W53272
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Concentration	1mg/ml (lot specific)
Specificity	USP21 Antibody detects endogenous levels of USP21.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.
Antibody/Peptide Pairs	USP21 peptide (MBS9632228) is used for blocking the activity of USP21 antibody (MBS9629845)
Molecular Weight	61,122 Da
OMIM	604729
3D Structure	ModBase 3D Structure for Q9UK80
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Immunogen	A synthesized peptide derived from human USP21.
Conjugation	Unconjugated
Similarity	Belongs to the peptidase C19 family. USP21 subfamily.
Subunit Structure	Interacts with BEND3 and BAZ2A/TIP5.
Tissue Specificity	Highly expressed in heart, pancreas and skeletal muscle. Also expressed in brain, placenta, liver and kidney, and at very low level in lung.
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. Deubiquitinates BAZ2A/TIP5 leading to its stabilization.

Product Categories/Family for anti-USP21 antibody	Cytoplasm; Nucleus; Primary
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-USP21 antibody	ELISA (EIA)(peptide)
Application Notes for anti-USP21 antibody	ELISA(peptide): 1:20000-1:40000
Related Product Information for anti-USP21 antibody	MBS9629845 is an antibody targeting USP21. Also known as USP21 Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.
Other Notes	Small volumes of anti-USP21 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for USP21. It may not necessarily be applicable to this product.

NCBI GI #	10720334
NCBI GeneID	27005
NCBI Accession #	Q9UK80.1
UniProt Primary Accession #	Q9UK80
UniProt Secondary Accession #	Q59H60; Q5BKT5; Q5VTW9; Q5VTX0; Q9BTV1; Q9HBS2; Q9NYN4
UniProt Related Accession #	Q9UK80
NCBI Official Full Name	Ubiquitin carboxyl-terminal hydrolase 21
NCBI Official Synonym Full Names	ubiquitin specific peptidase 21
NCBI Official Symbol	USP21
NCBI Official Synonym Symbols	USP16; USP23
UniProt Protein Name	Ubiquitin carboxyl-terminal hydrolase 21
UniProt Synonym Protein Names	Deubiquitinating enzyme 21; Ubiquitin thioesterase 21; Ubiquitin-specific-processing protease 21
UniProt Gene Name	USP21
UniProt Synonym Gene Names	USP23
UniProt Entry Name	UBP21_HUMAN
NCBI Protein Information	ubiquitin carboxyl-terminal hydrolase 21
NCBI Summary for USP21	This gene encodes a member of the C19 peptidase family, also known as family 2 of ubiquitin carboxy-terminal hydrolases. The encoded protein cleaves ubiquitin from ubiquitinated proteins for recycling in intracellular protein degradation. The encoded protein is also able to release NEDD8, a ubiquitin-like protein, from NEDD8-conjugated proteins. This gene has been referred to as USP16 and USP23 but is now known as USP21. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2016]

UniProt Comments for USP21	USP21: 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. Also capable of removing NEDD8 from NEDD8 conjugates but has no effect on Sentrin-1 conjugates. Belongs to the peptidase C19 family. USP21 subfamily. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Ubiquitin conjugating system; Protease; EC 3.4.19.12; Ubiquitin-specific protease Chromosomal Location of Human Ortholog: 1q22 Cellular Component: cytoplasm; nucleoplasm; plasma membrane Molecular Function: cysteine-type peptidase activity; metal ion binding; NEDD8-specific protease activity; protein binding; transcription coactivator activity; ubiquitin-specific protease activity Biological Process: histone deubiquitination; neurite development; positive regulation of transcription, DNA-dependent; transcription, DNA-dependent; ubiquitin-dependent protein catabolic process
Research Articles on USP21	**1.** Data show that SUMOylated BANP, E5R, and Nac1 (BEN) domain 3 (BEND3) stabilizes NoRC component TTF-1-interacting protein 5 (Tip5)via association with ubiquitin specific protease 21 (USP21) debiquitinase
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