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USP30 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14725a

Product Information

Application	IHC-P-Leica, WB, E
Primary Accession	Q70CQ3
Other Accession	Q3UN04, NP_116052.2
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34900
Calculated MW	58503
Antigen Region	156-185

Additional Information

Gene ID	84749
Other Names	Ubiquitin carboxyl-terminal hydrolase 30, Deubiquitinating enzyme 30, Ubiquitin thioesterase 30, Ubiquitin-specific-processing protease 30, Ub-specific protease 30, USP30
Target/Specificity	This USP30 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 156-185 amino acids from the N-terminal region of human USP30.
Dilution	IHC-P-Leica~~1:500 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 purified through a protein A column, followed by peptide affinity purification.
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	USP30 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	USP30 (HGNC:20065)

Function	Deubiquitinating enzyme tethered to the mitochondrial outer membrane that acts as a key inhibitor of mitophagy by counteracting the action of parkin (PRKN): hydrolyzes ubiquitin attached by parkin on target proteins, such as RHOT1/MIRO1 and TOMM20, thereby blocking parkin's ability to drive mitophagy (PubMed:18287522, PubMed:24896179, PubMed:25527291, PubMed:25621951). Preferentially cleaves 'Lys-6'- and 'Lys-11'-linked polyubiquitin chains, 2 types of linkage that participate in mitophagic signaling (PubMed:25621951). Does not cleave efficiently polyubiquitin phosphorylated at 'Ser-65' (PubMed:25527291). Acts as a negative regulator of mitochondrial fusion by mediating deubiquitination of MFN1 and MFN2 (By similarity).
Cellular Location	Mitochondrion outer membrane
Tissue Location	Expressed in skeletal muscle, pancreas, liver and kidney.

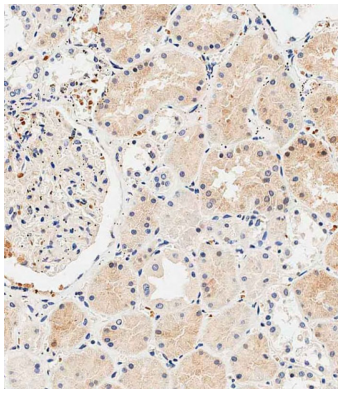
Background

USP30, a member of the ubiquitin-specific protease family (see USP1, MIM 603478), is a novel mitochondrial deubiquitinating (DUB) enzyme (Nakamura and Hirose, 2008 [PubMed 18287522]).

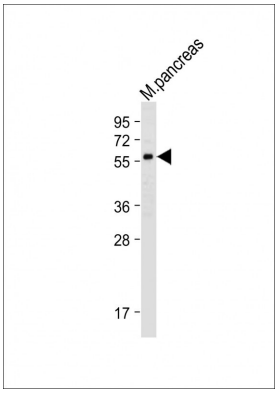
References

Nakamura, N., et al. Mol. Biol. Cell 19(5):1903-1911(2008)
Quesada, V., et al. Biochem. Biophys. Res. Commun. 314(1):54-62(2004)
Puente, X.S., et al. Nat. Rev. Genet. 4(7):544-558(2003)

Images



Immunohistochemical analysis of paraffin-embedded human kidney tissue using AP14725a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Anti-USP30 Antibody (N-term) at 1:1000 dilution + Mouse pancreas lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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