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USP40 Polyclonal Antibody

Catalog # AP73021

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q9NVE5
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	140130

Additional Information

Gene ID	55230
Other Names	USP40; Ubiquitin carboxyl-terminal hydrolase 40; Deubiquitinating enzyme 40; Ubiquitin thioesterase 40; Ubiquitin-specific-processing protease 40
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

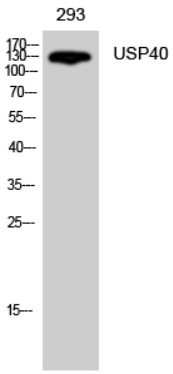
Name	USP40
Function	Deubiquitinating enzyme that plays a key role in maintaining endothelial cell (EC) barrier integrity and regulating apoptosis and inflammation. Stabilizes Claudin-1/CLDN1 by cleaving its polyubiquitin chains, thereby protecting tight junction structure (PubMed:38308285). Prevents EC barrier disruption by inhibiting RhoA activation and reducing phosphorylation of myosin light chain and cofilin. Suppresses EC inflammation by inhibiting NF-kappa-B activation, decreasing ICAM1 expression, and reducing leukocyte adhesion to ECs (PubMed:38307937). Mediates these protective effects in part via deubiquitination and inactivation of heat shock protein 90-beta/HSP90AB1 (PubMed:38307937). Targets CFLAR for 'Lys-48'-linked deubiquitination, stabilizing its protein levels. This interaction is facilitated by the adapter protein GMEB1, which enhances USP40-CFLAR binding. Through CFLAR stabilization, USP40 inhibits pro-caspase-8 activation and protects against apoptosis (PubMed:31046799). Additionally, USP40 stabilizes HINT1, an activator of p53/TP53, thereby maintaining p53/TP53 levels and sustaining the HINT1-p53/TP53 axis (By similarity).

Cellular Location	Cytoplasm.
Tissue Location	Broadly expressed..

Background

May be catalytically inactive.

Images



Western Blot analysis of 293 cells using USP40 Polyclonal Antibody diluted at 1：500. Secondary antibody was diluted at 1:20000

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