

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°C

Protein Information

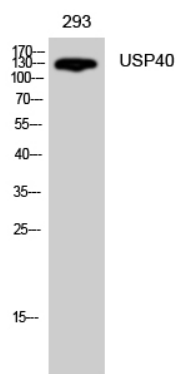
Name	USP40
Function	Deubiquitinating enzyme that plays a key role in maintaining endothelial cell (EC) barrier integrity and regulating apoptosis and inflammation. Stabilizes Claudin-1/CLDN1 by cleaving its polyubiquitin chains, thereby protecting tight junction structure (PubMed: 38308285). Prevents 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'.