

KD-Validated Anti-Ubiquitin Specific Peptidase 39 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1700

Specification

Gene Name Aliases

KD-Validated Anti-Ubiquitin Specific Peptidase 39 Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession 053GS9

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 65 kDa, observed, 65 kDa KDa

USP39

USP39; Ubiquitin Specific Peptidase 39; SNRNP65; CGI-21; SAD1; Small Nuclear Ribonucleoprotein 65kDa (U4/U6.U5); U4/U6.U5 Tri-SnRNP-Associated 65 KDa Protein; Ubiquitin Carboxyl-Terminal Hydrolase 39; Ubiquitin Specific Protease 39; SAD1 Homolog; SnRNP Assembly Defective 1 Homolog (S. Cerevisiae); Inactive Ubiquitin-Specific Peptidase 39; U4/U6.U5 Tri-SnRNP-Associated Protein; SnRNP Assembly Defective 1 Homolog; EC

3.4.19.12; HSPC332; 65K

Immunogen A synthesized peptide derived from human

USP39

KD-Validated Anti-Ubiquitin Specific Peptidase 39 Rabbit Monoclonal Antibody - Additional Information

Gene ID **10713**

Other Names

Ubiquitin carboxyl-terminal hydrolase 39, 3.4.19.12, SAD1 homolog, U4/U6.U5 tri-snRNP-associated 65 kDa protein, USP39 (HGNC:20071)

KD-Validated Anti-Ubiquitin Specific Peptidase 39 Rabbit Monoclonal Antibody - Protein Information

Name USP39 (HGNC:20071)

Function

Deubiquitinating enzyme that plays a role in many cellular processes including cellular antiviral response, epithelial morphogenesis, DNA repair or B-cell development (PubMed:33127822, PubMed:<a



href="http://www.uniprot.org/citations/34614178" target=" blank">34614178). Plays a role in pre-mRNA splicing as a component of the U4/U6-U5 tri-snRNP, one of the building blocks of the precatalytic spliceosome (PubMed:11350945, PubMed:26912367). Specifically regulates immunoglobulin gene rearrangement in a spliceosome-dependent manner, which involves modulating chromatin interactions at the Igh locus and therefore plays an essential role in B-cell development (By similarity). Regulates AURKB mRNA levels, and thereby plays a role in cytokinesis and in the spindle checkpoint (PubMed: 18728397). Regulates apoptosis and G2/M cell cycle checkpoint in response to DNA damage by deubiquitinating and stabilizing CHK2 (PubMed: 30771428). Also plays an important role in DNA repair by controlling the recruitment of XRCC4/LIG4 to DNA double-strand breaks for non-homologous end-joining repair (PubMed:34614178). Participates in antiviral activity by affecting the type I IFN signaling by stabilizing STAT1 and decreasing its 'Lys-6'-linked ubiquitination (PubMed:33127822). Contributes to non-canonical Wnt signaling during epidermal differentiation (By similarity). Acts as a negative regulator NF-kappa-B activation through deubiquitination of 'Lys-48'-linked ubiquitination of NFKBIA (PubMed: 36651806).

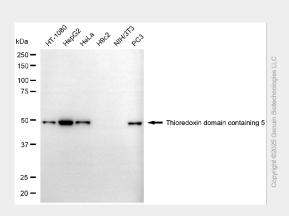
Cellular Location Nucleus

KD-Validated Anti-Ubiquitin Specific Peptidase 39 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

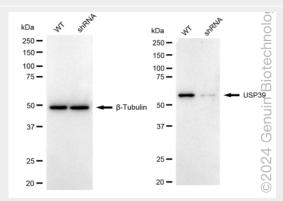
KD-Validated Anti-Ubiquitin Specific Peptidase 39 Rabbit Monoclonal Antibody - Images



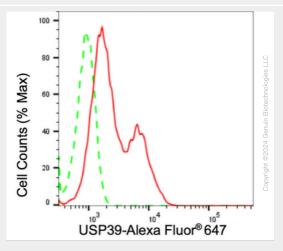
Western blotting analysis using anti-USP39 antibody (Cat#AGI1700). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with



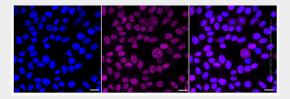
anti-USP39 antibody (Cat#AGI1700, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-USP39 antibody (Cat#AGI1700). USP39 expression in wild type (WT) and USP39 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-USP39 antibody (Cat#AGI1700, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of USP39 expression in HepG2 cells using anti-USP39 antibody (Cat#AGI1700, 1:2,000). Green, isotype control; red, USP39.



Immunocytochemical staining of HepG2 cells with anti-USP39 antibody (Cat#AGI1700, 1:1,000). Nuclei were stained blue with DAPI; USP39 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: $20~\mu m$.