

KD-Validated Anti-Ring Finger Protein 2 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1891

Specification

KD-Validated Anti-Ring Finger Protein 2 Rabbit Monoclonal Antibody - Product Information

Application WB, FC Primary Accession Q99496

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 38 kDa, observed, 38 kDa KDa

Gene Name RN

Aliases RNF2; Ring Finger Protein 2; RING1B; HIPI3: BAP1: DING: BAP-1: RING2:

HIPI3; BAP1; DING; BAP-1; RING2; Huntingtin-Interacting Protein

2-Interacting Protein 3; RING-Type E3 Ubiquitin Transferase RING2; E3 Ubiquitin-Protein Ligase RING2;

HIP2-Interacting Protein 3; RING Finger Protein BAP-1; RING Finger Protein 1B; Protein DinG; RING Finger Protein; EC 2.3.2.27; EC 6.3.2; LUSYAM; RING1b

Immunogen A synthesized peptide derived from human

RING2 / RING1B / RNF2

KD-Validated Anti-Ring Finger Protein 2 Rabbit Monoclonal Antibody - Additional Information

Gene ID **6045**

Other Names

E3 ubiquitin-protein ligase RING2, 2.3.2.27, Huntingtin-interacting protein 2-interacting protein 3, HIP2-interacting protein 3, Protein DinG, RING finger protein 1B, RING1b, RING finger protein 2, RING finger protein BAP-1, RING-type E3 ubiquitin transferase RING2, RNF2, BAP1, DING, HIPI3, RING1B

KD-Validated Anti-Ring Finger Protein 2 Rabbit Monoclonal Antibody - Protein Information

Name RNF2

Synonyms BAP1, DING, HIPI3, RING1B

Function

E3 ubiquitin-protein ligase that mediates monoubiquitination of 'Lys-119' of histone H2A (H2AK119Ub), thereby playing a central role in histone code and gene regulation (PubMed:15386022, PubMed:<a



href="http://www.uniprot.org/citations/16359901" target=" blank">16359901, PubMed:21772249, PubMed:25355358, PubMed:25355358, PubMed:26151332, PubMed:33864376). H2AK119Ub gives a specific tag for epigenetic transcriptional repression and participates in X chromosome inactivation of female mammals. May be involved in the initiation of both imprinted and random X inactivation (By similarity). Essential component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development (PubMed:16359901, PubMed:26151332). PcG PRC1 complex acts via chromatin remodeling and modification of histones, rendering chromatin heritably changed in its expressibility (PubMed:26151332). E3 ubiquitin-protein ligase activity is enhanced by BMI1/PCGF4 (PubMed: 21772249). Acts as the main E3 ubiquitin ligase on histone H2A of the PRC1 complex, while RING1 may rather act as a modulator of RNF2/RING2 activity (Probable). Association with the chromosomal DNA is cell-cycle dependent. In resting B- and T-lymphocytes, interaction with AURKB leads to block its activity, thereby maintaining transcription in resting lymphocytes (By similarity). Also acts as a negative regulator of autophagy by mediating ubiquitination of AMBRA1, leading to its subsequent degradation (By similarity).

Cellular Location

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q9CQJ4}. Chromosome {ECO:0000250|UniProtKB:Q9CQJ4}. Note=Enriched on inactive X chromosome (Xi) in female trophoblast stem (TS) cells as well as differentiating embryonic stem (ES) cells. The enrichment on Xi is transient during TS and ES cell differentiation. The association with Xi is mitotically stable in non-differentiated TS cells. Co-localizes with SAMD7 in nuclear polycomb bodies. {ECO:0000250|UniProtKB:Q9CQJ4}

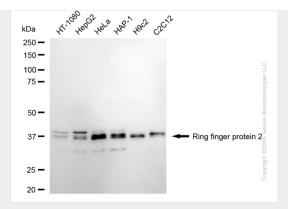
KD-Validated Anti-Ring Finger Protein 2 Rabbit Monoclonal Antibody - Protocols

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

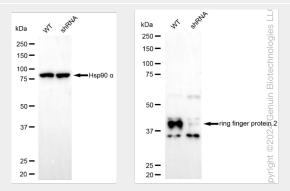
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Ring Finger Protein 2 Rabbit Monoclonal Antibody - Images

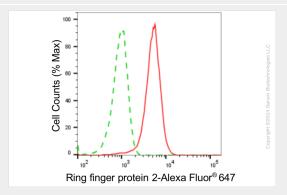




Western blotting analysis using anti-ring finger protein 2 antibody (Cat#AGI1891). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ring finger protein 2 antibody (Cat#AGI1891, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-ring finger protein 2 antibody (Cat#AGI1891). Ring finger protein 2 expression in wild type (WT) and ring finger protein 2 (RNF2) shRNA knockdown (KD) HT-1080 cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-ring finger protein 2 antibody (Cat#AGI1891, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Ring finger protein 2 expression in HeLa cells using anti-Ring finger protein 2 antibody (Cat#AGI1891, 1:2,000). Green, isotype control; red, Ring finger protein 2.