

RING2 Rabbit mAb

Catalog # AP76783

Product Information

Application WB, IHC-P
Primary Accession Q99496
Reactivity Human
Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 37655

Additional Information

Gene ID 6045

Other Names RNF2

Dilution WB~~1/500-1/1000 IHC-P~~N/A

Format Liquid

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:16359901, PubMed:21772249,

PubMed:25355358, PubMed:25519132, 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

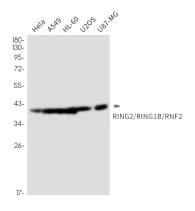
(PubMed:<u>26151332</u>). E3 ubiquitin-protein ligase activity is enhanced by BMI1/PCGF4 (PubMed:<u>21772249</u>). Acts as the main E3 ubiquitin ligase on histone H2A of the PRC1 complex, while RING1 may rather act as a modulator of RNF2/RING2 activity (Probable). Association with the chromosomal DNA 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

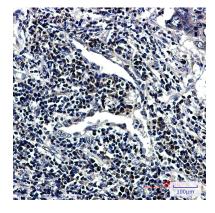
mediating ubiquitination of AMBRA1, leading to its subsequent degradation (By similarity).

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}

Images





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