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Anti-RING1B (GOAT) Antibody
RING1B Antibody
Catalog # ASR5091

Specification

Anti-RING1B (GOAT) Antibody - Product Information

Host	**Goat**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human, Mouse**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**Anti-RING1B purified antibody has been tested for use in ELISA, immunofluorescence, and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 38 kDa in size corresponding to RING1B by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**RING1B Antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near aa 180-205 of human RING1B protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-RING1B (GOAT) Antibody - Additional Information

Gene ID 6045

Other Names
6045

Purity
Affinity purified Anti-RING1B antibody is directed against human RING1B protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, chimpanzee, orangutan, mouse, rat, dog, bovine, frog and chicken based on 100% homology for the immunogen sequence. Expect cross reactivity with RING1B from zebrafish, as only a single amino acid residue changes within the immunogen sequence (92% positive by BLAST). Cross reactivity with RING1B homologues from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after

standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-RING1B (GOAT) 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: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: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).

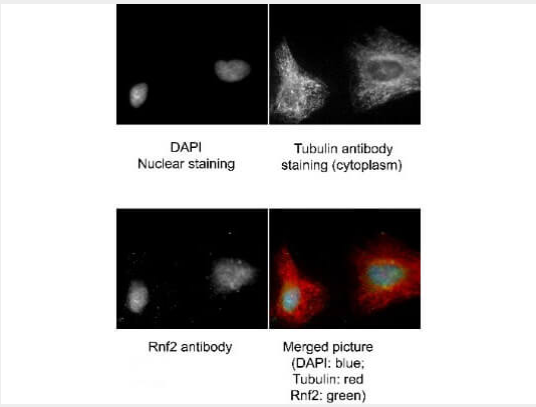
Cellular Location
Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q9CQJ4}. Chromosome {ECO:0000250|UniProtKB:Q9CQJ4}. Note=Enriched on inactive X chromosome (Xi) in female trophoblast stem (TS) cells as well as differentiating embryonic stem (ES) cells. The enrichment on Xi is transient during TS and ES cell 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}

Anti-RING1B (GOAT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-RING1B (GOAT) Antibody - Images



Immunofluorescence Microscopy of Goat anti-RING1B antibody. Tissue: human HeLa cells. Fixation: methanol and blocked with 0.2% fish scale gelatin for 1 hour at 25°C. Antigen retrieval: not required. Primary antibody: RING1B antibody at 1:300 for 20 minutes at 25°C. Secondary antibody: Alexa Fluor®488-conjugated Donkey anti-goat IgG secondary antibody at 1:500 for 45 min at RT. Localization: RING1B is nuclear and occasionally cytoplasmic. Staining: RING1B (RNF2) as green signal, Tubulin cytoplasm staining red, and DAPI (blue) nuclear counterstain.

Anti-RING1B (GOAT) Antibody - Background

RING1B (also known as BAP1 and RNF2) is one of the PcG proteins. The polycomb group (PcG) of proteins form the multiprotein complexes that are important for the transcription repression of various genes involved in development and cell proliferation. It has been shown to interact with, and suppress the activity of, transcription factor CP2 (TFCP2/CP2). Studies of the mouse counterpart suggested the involvement of this gene in the specification of anterior-posterior axis, as well as in cell proliferation in early development. This protein was also found to interact with huntingtin interacting protein 2 (HIP2), a ubiquitin-conjugating enzyme that possesses ubiquitin ligase activity. Anti-RINGB1 Antibody is useful for researchers interested in epigenetics, ubiquitin, and transcription factor research.