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(Mouse) Rnf2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21500c

Specification

(Mouse) Rnf2 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q9CQJ4
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**37623**

(Mouse) Rnf2 Antibody (Center) - Additional Information

Gene ID 19821

Other Names
E3 ubiquitin-protein ligase RING2, 632-, RING finger protein 1B, RING1b, RING finger protein 2, Rnf2, DinG, Ring1b

Target/Specificity
This Mouse Rnf2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 198-232 amino acids from the Central region of Mouse Rnf2.

Dilution
WB~~1:2000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
(Mouse) Rnf2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

(Mouse) Rnf2 Antibody (Center) - Protein Information

Name Rnf2

Synonyms DinG, 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:15525528, PubMed:22325148, PubMed:28596365). H2AK119Ub gives a specific tag for epigenetic transcriptional repression and participates in X chromosome inactivation of female mammals (PubMed:15525528, PubMed:28596365). May be involved in the initiation of both imprinted and random X inactivation (PubMed:15525528). 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:16710298, PubMed:22325148). PcG PRC1 complex acts via chromatin remodeling and modification of histones, rendering chromatin heritably changed in its expressibility (PubMed:15525528, PubMed:16710298, PubMed:22325148). E3 ubiquitin-protein ligase activity is enhanced by BMI1/PCGF4 (PubMed:16710298). 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 (PubMed:15525528, PubMed:16710298). Plays a role in the transcriptional repression of genes that are required for pluripotency in embryonic stem cells, thereby contributing to differentiation of the ectodermal and endodermal germ layers (PubMed:22226355). 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 (PubMed:24034696). Also acts as a negative regulator of autophagy by mediating ubiquitination of AMBRA1, leading to its subsequent degradation (PubMed:24980959).

Cellular Location
Nucleus. Cytoplasm Chromosome Note=Enriched on inactive X chromosome (Xi) in female trophoblast stem (TS) cells as well as differentiating embryonic stem (ES) cells (PubMed:12183370). The enrichment on Xi is transient during TS and ES cell differentiation. The association with Xi is mitotically stable in non-differentiated TS cells (PubMed:12183370). Co-localizes with SAMD7 in nuclear polycomb bodies (PubMed:28900001)

Tissue Location
Expressed in embryonic stem cells.

(Mouse) Rnf2 Antibody (Center) - 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

(Mouse) Rnf2 Antibody (Center) - Images

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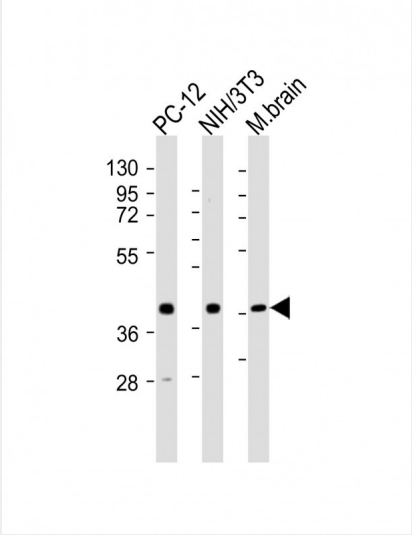
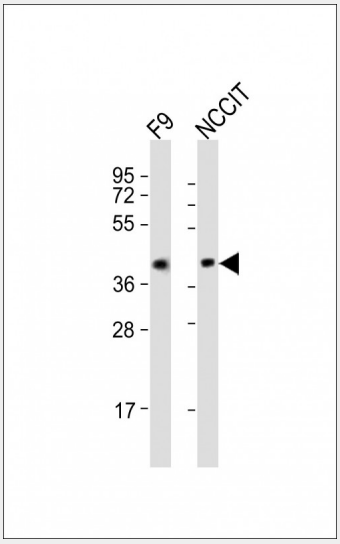


All lanes : Anti-Rnf2 Antibody (Center) at 1:2000 dilution Lane 1: PC-12 whole cell lysates Lane 2: NIH/3T3 whole cell lysates Lane 3: mouse brain lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-Rnf2 Antibody (Center) at 1:2000 dilution Lane 1: F9 whole cell lysates Lane 2: NCCIT whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

(Mouse) Rnf2 Antibody (Center) - Background

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. 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. 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. PcG PRC1 complex acts via chromatin remodeling and modification of histones, rendering chromatin heritably changed in its expressibility. E3 ubiquitin-protein ligase activity is enhanced by BMI1/PCGF4. 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. Association to 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.

(Mouse) Rnf2 Antibody (Center) - References

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