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(Mouse) Rnf2 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP21227c

Specification

(Mouse) Rnf2 Blocking Peptide (Center) - Product Information

Primary Accession Q9CQJ4

(Mouse) Rnf2 Blocking Peptide (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
The synthetic peptide sequence is selected from aa 165-179 of HUMAN Rnf2

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

(Mouse) Rnf2 Blocking Peptide (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:22325148, PubMed:16710298). PcG PRC1 complex acts via chromatin remodeling and modification of histones, rendering chromatin heritably changed in its expressibility (PubMed:15525528, PubMed:22325148, PubMed:16710298). 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).

Tissue Location
Expressed in embryonic stem cells.

(Mouse) Rnf2 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides

(Mouse) Rnf2 Blocking Peptide (Center) - Images

(Mouse) Rnf2 Blocking Peptide (Center) - Background

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