



Mouse Anti-RNF2 monoclonal antibody, clone 4-4 (CABT-RM132)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Specifically detects E3 ubiquitin-protein ligase RING2 (RING1B).
Target	RNF2
Immunogen	GST-tagged full length murine RING2 protein.
Isotype	IgG2b, κ
Source/Host	Mouse
Species Reactivity	Human, Monkey, Mouse
Clone	4-4
Purification	Protein G purified
Conjugate	unconjugated
Applications	ChIP, ICC, IP, WB
Molecular Weight	~42 kDa observed; 37.62 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	100 μ g
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl
Preservative	0.05% sodium azide

StorageStable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction

E3 ubiquitin-protein ligase RING2 is encoded by the Rnf2 gene in murine species. RING2 is an essential component of Polycomb-repressive complex 1 (PRC1) and serves as the main E3 ubiquitin ligase and plays a role in the transcriptional repression of genes that are required for pluripotency in embryonic stem cells. PRC1 and PRC2 act to maintain repression at many developmental genes in mouse embryonic stem cells and are required for early development. PRC1 mediates Histone H2A mono-ubiquitination at K119 (H2AK119ub1) and PRC2 mediates H3 tri-methylation at K27 (H3K27me3). H2AK119Ub gives a specific tag for epigenetic transcriptional repression and participates in X chromosome inactivation of female mammals. RING2 is predominantly expressed in embryonic stem cells. It has a RING-type zinc-finger domain (aa 51-91). RING2 inactivation is reported to lead to phenotypes that combine both differentiation and proliferation defects that can lead to upregulation of tumor suppressors that inhibit cyclin-dependent kinases (CDKs) and control cell proliferation by modulating S-phase entry. RING2 null mutations lead to embryonic lethality.

Keywords

RNF2; ring finger protein 2; E3 ubiquitin-protein ligase RING2; BAP 1; BAP1; DING; HIP13; RING1B; RING2; protein DinG; RING finger protein 1B; RING finger protein BAP-1; HIP2-interacting protein 3; huntingtin-interacting protein 2-interacting protein 3; BAP-1

GENE INFORMATION

Entrez Gene ID[19821](#)**UniProt ID**[Q9CQJ4](#)
