

Recombinant Anti-RING3 Rabbit mAb

Catalog # AP95288

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	P25440
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	88061

Additional Information

Gene ID	6046
Other Names	KIAA9001; RING3; Bromodomain-containing protein 2; O27.1.1; Really interesting new gene 3 protein
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human RING3 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

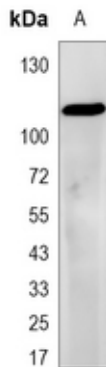
Name	BRD2 {ECO:0000303 PubMed:16227282, ECO:0000312 HGNC:HGNC:1103}
Function	Chromatin reader protein that specifically recognizes and binds histone H4 acetylated at 'Lys-5' and 'Lys-12' (H4K5ac and H4K12ac, respectively), thereby controlling gene expression and remodeling chromatin structures (PubMed: 17148447 , PubMed: 17848202 , PubMed: 18406326 , PubMed: 20048151 , PubMed: 20709061 , PubMed: 20871596). Recruits transcription factors and coactivators to target gene sites, and activates RNA polymerase II machinery for transcriptional elongation (PubMed: 28262505). Plays a key role in genome compartmentalization via its association with CTCF and cohesin: recruited to chromatin by CTCF and promotes formation of topologically associating domains (TADs) via its ability to bind acetylated histones, contributing to CTCF boundary formation and enhancer insulation (PubMed: 35410381). Also recognizes and binds acetylated non-histone proteins, such as STAT3 (PubMed: 28262505). Involved in inflammatory response by regulating differentiation of naive CD4(+) T-cells into T- helper Th17: recognizes and binds STAT3 acetylated at 'Lys-87', promoting STAT3 recruitment to chromatin (PubMed: 28262505). In addition to acetylated

lysines, also recognizes and binds lysine residues on histones that are both methylated and acetylated on the same side chain to form N6-acetyl-N6-methyllysine (Kacme), an epigenetic mark of active chromatin associated with increased transcriptional initiation (PubMed:[37731000](#)). Specifically binds histone H4 acetyl-methylated at 'Lys-5' and 'Lys-12' (H4K5acme and H4K12acme, respectively) (PubMed:[37731000](#)).

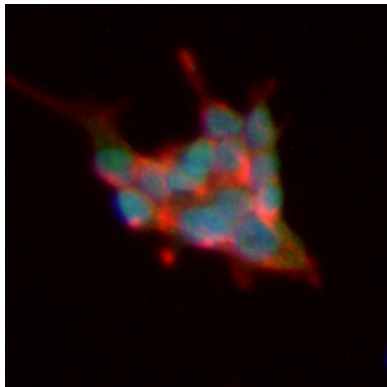
Cellular Location

Nucleus. Chromosome Note=Detected on chromatin and nucleosomes

Images



Western blot analysis of RING3 expression in NCCIT (A) whole cell lysates. (Predicted band size: 88 kD; Observed band size: 110 kD)



Immunofluorescent analysis of RING3 staining in NCCIT cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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