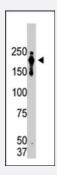


PRDM2 monoclonal antibody, clone 33AT1045

Catalog # MAB1151 Size 400 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of PRDM2 monoclonal antibody, clone 33AT1045 (Cat # MAB1151) in lysate from transformed cells. Lane A: mock plasmid, Lane B: PRDM2 [1-347]-encoding plasmid. PRDM2 [1-347] (arrow) was detected using purified monoclonal antibody. Secondary HRP-anti-mouse was used for signal visualization with chemiluminescence.

Immunoprecipitation



A: Soluble chromatin was prepared from MCF-7 cells not treated or treated with E2 for 45 min. Immunoprecipitation was performed with PRDM2 monoclonal antibody, clone 33AT1045 (Cat # MAB1151). DNA extractions were amplified by using primer sets that cover the pS2 gene promoter region or the GAPDH gene promoter.

B: Time course analysis of PRDM2 binding to the pS2 gene promoter. MCF-7 cells treated with E2 for different periods of time, as indicated at the top of each lane, were processed for ChIP analysis.

Specification	
Product Description	Mouse monoclonal antibody raised against partial recombinant PRDM2.
Immunogen	Recombinant GST fusion protein corresponding to amino acids 1-347 of human PRDM2.
Host	Mouse
Reactivity	Human, Mouse
Form	Liquid
Purification	Protein G purification



Isotype	lgG1
Recommend Usage	Western Blot (1:1000)
	The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C.
	Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul
	d be handled by trained staff only.

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Gene Info — PRDM2	
Entrez GeneID	7799
GeneBank Accession#	NM_012231;NM_01586
Gene Name	PRDM2
Gene Alias	HUMHOXY1, KMT8, MTB-ZF, RIZ, RIZ1, RIZ2
Gene Description	PR domain containing 2, with ZNF domain
Omim ID	<u>601196</u>
Gene Ontology	<u>Hyperlink</u>



Product Information

Gene Summary

This tumor suppressor gene is a member of a nuclear histone/protein methyltransferase superfam ily. It encodes a zinc finger protein that can bind to retinoblastoma protein, estrogen receptor, and the TPA-responsive element (MTE) of the heme-oxygenase-1 gene. Although the functions of this protein have not been fully characterized, it may (1) play a role in transcriptional regulation during neuronal differentiation and pathogenesis of retinoblastoma, (2) act as a transcriptional activator of the heme-oxygenase-1 gene, and (3) be a specific effector of estrogen action. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq

Other Designations

GATA-3 binding protein G3B|MTE-binding protein|OTTHUMP0000009642|OTTHUMP0000000 9687|retinoblastoma protein-binding zinc finger protein|retinoblastoma protein-interacting zinc finger protein|zinc-finger DNA-binding protein

Publication Reference

 Genotypes and haplotypes of the estrogen receptor genes, but not the retinoblastoma-interacting zinc finger protein 1 gene, are associated with osteoporosis.

Harslof T, Husted LB, Carstens M, Stenkjaer L, Langdahl BL.

Calcified Tissue International 2010 May; 87(1):25.

 DNA methylation of the RIZ1 tumor suppressor gene plays an important role in the tumorigenesis of cervical cancer.

Cheng HY, Gao Y, Lou G.

European Journal of Medical Research 2010 Jan; 15(1):20.

• Genetic variants of methyl metabolizing enzymes and epigenetic regulators: associations with promoter CpG island hypermethylation in colorectal cancer.

de Vogel S, Wouters KA, Gottschalk RW, van Schooten FJ, de Goeij AF, de Bruine AP, Goldbohm RA, van den Brandt PA, Weijenberg MP, van Engeland M.

Cancer Epidemiology, Biomarkers & Prevention 2009 Oct; 18(11):3086.

Disease

- Alzheimer disease
- Breast cancer
- Breast Neoplasms
- Cardiovascular Diseases
- Colorectal Neoplasms



- <u>Diabetes Complications</u>
- Fractures
- Genetic Predisposition to Disease
- Lung Neoplasms
- Metabolic Syndrome X
- Microsatellite Instability
- Neoplasm Invasiveness
- Neoplasms
- Osteoporosis
- Ovarian cancer
- Ovarian Neoplasms
- Retinoblastoma