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PRKCBP1 Rabbit pAb

Catalog # AP100123

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9ULU4
Other Accession	Q9ULU4
Reactivity	Human, Mouse
Predicted	Rabbit, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	131692
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PRKCBP1
Epitope Specificity	1-100/1186
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 bromo domain.
SUBUNIT	Interacts in vitro with PRKCB1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is a receptor for activated C-kinase (RACK) protein. The encoded protein has been shown to bind in vitro to activated protein kinase C beta I. In addition, this protein is a cutaneous T-cell lymphoma-associated antigen. Finally, the protein contains a bromodomain and two zinc fingers, and is thought to be a transcriptional regulator. Multiple transcript variants encoding several different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	23613
Other Names	PRKCBP1; PRO2893; RACK7; ZMYD8_HUMAN; ZMYND8; Cutaneous T-cell lymphoma-associated antigen se14-3 (CTCL-associated antigen se14-3); Protein kinase C-binding protein 1; Transcription coregulator ZMYND8; Zinc finger MYND domain-containing protein 8; KIAA1125; zinc finger MYND-type containing 8; protein kinase C binding protein 1; RACK like clone 7
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ZMYND8
Synonyms	KIAA1125, PRKCBP1, RACK7
Function	Chromatin reader that recognizes dual histone modifications such as histone H3.1 dimethylated at 'Lys-36' and histone H4 acetylated at 'Lys-16' (H3.1K36me2-H4K16ac) and histone H3 methylated at 'Lys-4' and histone H4 acetylated at 'Lys-14' (H3K4me1-H3K14ac) (PubMed:26655721, PubMed:27477906, PubMed:31965980, PubMed:36064715). May act as a transcriptional corepressor for KDM5D by recognizing the dual histone signature H3K4me1-H3K14ac (PubMed:27477906). May also act as a transcriptional corepressor for KDM5C and EZH2 (PubMed:33323928). Recognizes acetylated histone H4 and recruits the NuRD chromatin remodeling complex to damaged chromatin for transcriptional repression and double-strand break repair by homologous recombination (PubMed:25593309, PubMed:27732854, PubMed:30134174). Also activates transcription elongation by RNA polymerase II through recruiting the P- TEFb complex to target promoters (PubMed:26655721, PubMed:30134174). Localizes to H3.1K36me2-H4K16ac marks at all-trans-retinoic acid (ATRA)-responsive genes and positively regulates their expression (PubMed:26655721). Promotes neuronal differentiation by associating with regulatory regions within the MAPT gene, to enhance transcription of a protein-coding MAPT isoform and suppress the non-coding MAPT213 isoform (PubMed:30134174, PubMed:35916866, PubMed:36064715). Suppresses breast cancer, and prostate cancer cell invasion and metastasis (PubMed:27477906, PubMed:31965980, PubMed:33323928).
Cellular Location	Nucleus. Chromosome. Cytoplasm. Note=Sequestered in the cytoplasm through the interaction with DBN1 (PubMed:28966017). Localizes to sites of DNA damage in a KAT5-dependent and DNA poly (ADP-ribose)-dependent manner (PubMed:25593309, PubMed:27732854). On chromatin, localizes to demethylated regions, active promoters, and transcription start sites (PubMed:27732854, PubMed:36064715).
Tissue Location	Expressed in neurons (at protein level) (PubMed:36064715). Absent in astrocytes (at protein level) (PubMed:36064715). Expressed in all tissues examined with highest expression in brain, lung, pancreas, and placenta (PubMed:11003709, PubMed:35916866). Expressed in cutaneous T-cell lymphomas (CTCL) (PubMed:11149944).

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