



Rabbit Anti-DMAP1 antibody

SL13009R

Product Name:	DMAP1
Chinese Name:	DNA甲基转移酶相关蛋白1抗体
Alias:	DKFZp686L09142; DMAP 1; DNA methyltransferase 1-associated protein 1; DNMAP 1; DNMAP1; DNMT1-associated protein 1; DNMT1-associated protein 1; DNMTAP 1; DNMTAP1; EAF 2; EAF2; FLJ11543; KIAA1425; MAT 1-mediated transcriptional repressor; MGC55593; SWC 4; SWC4; zgc:55593.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Rabbit,Sheep,Xenopus laevis
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	53kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DMAP1:31-130/467
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	Methylation of DNA contributes to the regulation of gene transcription in eukaryotic systems. DNA methylation is predominantly found on cytosine residues that are present in dinucleotide motifs consisting of a 5' cytosine followed by a guanosine (CpG), and it requires the enzymatic activity of DNA methyltransferases (DNMTs), which results in

transcriptional repression of the methylated gene. DNA methyltransferase 1-associating protein (Dmap1) binds to methyl-CpG rich domains and mediate the transcriptional inhibition associated with DNA methylation. Dmap1 interacts with Daxx to enhanced Daxx-mediated repression of glucocorticoid receptor transcriptional activity. Daxx also protects Dmap1 from protein degradation in vivo.

Function:

DMAP1 is involved in transcription repression and activation. Its interaction with HDAC2 may provide a mechanism for histone deacetylation in heterochromatin following replication of DNA at late firing origins. Can also repress transcription independently of histone deacetylase activity. May specifically potentiate DAXX-mediated repression of glucocorticoid receptor-dependent transcription. Component of the NuA4 histone acetyltransferase (HAT) complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histone H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage.

Subunit:

Component of the NuA4 histone acetyltransferase complex which contains the catalytic subunit KAT5/TIP60 and the subunits EP400, TRRAP/PAF400, BRD8/SMAP, EPC1, DMAP1/DNMAP1, RUVBL1/TIP49, RUVBL2, ING3, actin, ACTL6A/BAF53A, MORF4L1/MRG15, MORF4L2/MRGX, MRGBP, YEATS4/GAS41, VPS72/YL1 and MEAF6. Component of a NuA4-related complex which contains EP400, TRRAP/PAF400, SRCAP, BRD8/SMAP, EPC1, DMAP1/DNMAP1, RUVBL1/TIP49, RUVBL2, actin, ACTL6A/BAF53A, VPS72 and YEATS4/GAS41. DMAP1 also forms a complex with DNMT1 and HDAC2. Throughout S phase it interacts directly with the N-terminus of DNMT1, which serves to recruit DMAP1 to replication foci. DMAP1 interacts with ING1, a component of the mSin3A transcription repressor complex, although this interaction is not required for recruitment of ING1 to heterochromatin. Interacts directly with the transcriptional corepressor TSG101. Interacts with the pro-apoptotic protein DAXX. Interacts with URI1.

Subcellular Location:

Nucleus. Cytoplasm. Note=Targeted to replication foci throughout S phase by DNMT1.

Similarity:

Contains 1 SANT domain.

SWISS:

Q9NPF5

Gene ID:
55929

Database links:

[Entrez Gene: 55929](#)Human

[Entrez Gene: 66233](#)Mouse

[Entrez Gene: 298447](#)Rat

[Omim: 605077](#)Human

[SwissProt: Q9NPF5](#)Human

[SwissProt: A2ADW4](#)Mouse

[SwissProt: Q9JI44](#)Mouse

[SwissProt: Q568Y6](#)Rat

[Unigene: 8008](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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