

For Research Use Only

DNMT2 Polyclonal antibody

Catalog Number: 19221-1-AP

Featured Product

4 Publications



Basic Information

Catalog Number: 19221-1-AP	GenBank Accession Number: BC047733	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 260 ug/ml by Nanodrop and 133 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 1787	Recommended Dilutions: WB 1:500-1:2000
Source: Rabbit	UNIPROT ID: O14717	
Isotype: IgG	Full Name: tRNA aspartic acid methyltransferase 1	
Immunogen Catalog Number: AG5571	Calculated MW: 45 kDa	
	Observed MW: 43-45 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB : HeLa cells, HEK-293 cells, MCF-7 cells, mouse liver tissue
Cited Applications: WB, IF	
Species Specificity: human, mouse, rat	
Cited Species: human	

Background Information

Dnmt2 was initially assigned a member of the DNA methyltransferase family on the basis of its extensive homology with eukaryotic and prokaryotic DNA-(cytosine C5)-methyltransferases . However, in the apparent absence of a phenotype in dnmt2 knockout cells, Dnmt2's possible biological function remained unknown , even though Dnmt2 is strongly conserved and it is found in species ranging from Schizosaccharomyces pombe to human. Later very weak, residual DNA methylation activity was found with enzymes from different species. The finding that Dnmt2 is an active RNA methyltransferase capable of methylating the C38 position of the tRNA Asp came as a surprise . However, still no cellular function of the tRNA Asp methylation has been found, although in Zebrafish Dnmt2 knock-down caused a developmental phenotype . It is very intriguing that an enzyme that looks like a DNA methyltransferase can methylate RNA, in particular since the RNA and DNA specific m5 C methyltransferases use different catalytic residues and a different mechanism for the methyl transfer reaction . the predicted molecular weight of Dnmt2 is 45 kDa, but it may migrate to the 40 kDa (PMID: 18567810)

Notable Publications

Author	Pubmed ID	Journal	Application
Lijie Zhou	34185414	Clin Transl Med	WB
Ulrike Schumann	32293435	BMC Biol	WB
Shuang Ding	38216565	Cell Death Dis	WB

Storage

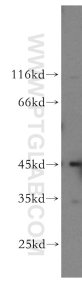
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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Selected Validation Data



HeLa cells were subjected to SDS PAGE followed by western blot with 19221-1-AP (DNMT2 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.