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PCMT1 Rabbit pAb

Catalog # AP98272

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P22061
Other Accession	P22061
Reactivity	Rat, Human
Predicted	Pig, Mouse, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24636
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PCMT1
Epitope Specificity	165-227/227
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the methyltransferase superfamily. L-isoaspartyl/D-aspartyl protein methyltransferase family.
SUBUNIT	Monomer.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	PCMT1 (Protein-L-isoaspartate (D-aspartate) O-methyltransferase) plays a role in the repair and/or degradation of damaged proteins by initiating the conversion of abnormal D-aspartyl and L-isoaspartyl residues to the normal L-aspartyl form. It catalyzes the methyl esterification of L-isoaspartyl and D-aspartyl residues in peptides and proteins that result from spontaneous deamidation, isomerization, and racemization of normal L-aspartyl and L-asparaginyl residues.

Additional Information

Gene ID	5110
Other Names	PIMT; PCM; PIMT_HUMAN; PCMT1; L-isoaspartyl protein carboxyl methyltransferase; Protein L-isoaspartyl/D-aspartyl methyltransferase; Protein-beta-aspartate methyltransferase; 2.1.1.77; PIMT_MOUSE; PIMT_RAT; protein-L-isoaspartate (D-aspartate) O-methyltransferase
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	PCMT1
Function	Initiates the repair of damaged proteins by catalyzing methyl esterification of L-isoaspartyl and D-aspartyl residues produced by spontaneous isomerization and racemization of L-aspartyl and L- asparaginyl residues in aging peptides and proteins (PubMed:3167043, PubMed:6469980). Acts on EIF4EBP2, microtubule-associated protein 2, calreticulin, clathrin light chains a and b, Ubiquitin C-terminal hydrolase isozyme L1, phosphatidylethanolamine-binding protein 1, stathmin, beta-synuclein and alpha-synuclein (By similarity).
Cellular Location	Cytoplasm, cytosol.

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