Technical Data Sheet Purified Mouse Anti- PCMT-I/II

Product Information

Material Number:	610772		
Alternate Name:	Protein Carboxyl Methyl Transferase; PIMT		
Size:	50 µg		
Concentration:	250 µg/ml		
Clone:	4/PCMT-II		
Immunogen:	Human PCMT-II aa. 10-211		
Isotype:	Mouse IgG1		
Reactivity:	QC Testing: Human Tested in Development: Dog		
Target MW:	25 kDa		
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide		

Description

PCMT-II (Protein Carboxyl Methyl Transferase), or L-isoaspartate (D-aspartate) O-methyltransferase, is a cytosolic enzyme that is expressed in all tissues as well as in bacteria. Interestingly, PCMT-II is highly expressed in the brain. It recognizes damaged proteins that result from deamidation, isomerization, and racemization reactions. These proteins contain L-isoaspartyl and D-aspartyl residues and can have abnormal configurations that result in anomalous or loss of function. PCMT-II catalyzes the first step of the conversion of these unusual residues to normal L-aspartyl residues. This mechanism prevents the accumulation of aberrant proteins in aging cells. *Pcmt-1* knock-out mice display growth retardation and a seizure disorder that results in death at an average age of 42 days. Thus, PCMT-II is necessary for growth and nervous system function. The immunogen region from human PCMT-II used to generate this antibody has been reported to be identical to the region in PCMT-I.





Western blot analysis of PCMT-I/II on a A431 cell Iysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti- PCMT-I/II antibody. Immunofluorescence staining of human intestinal smooth muscle cells (HISM).

Preparation and Storage

Store undiluted at -20° C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

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Application Notes

Application

	Incation		
	Western blot	Routinely Tested	
	Immunofluorescence	Tested During Development	
	Immunohistochemistry	Not Recommended	
Γ	Immunoprecipitation	Not Recommended	

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611447	A431 Cell Lysate	500 μg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.

2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before

discarding to avoid accumulation of potentially explosive deposits in plumbing.

4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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