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DPEP1 Rabbit pAb

Catalog # AP98945

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	P16444
Other Accession	P16444
Predicted	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45674
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DPEP1
Epitope Specificity	201-300/411
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 peptidase M19 family.
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 kidney membrane enzyme involved in the metabolism of glutathione and other similar proteins by dipeptide hydrolysis. The encoded protein is known to regulate leukotriene activity by catalyzing the conversion of leukotriene D4 to leukotriene E4. This protein uses zinc as a cofactor and acts as a disulfide-linked homodimer. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jan 2012]

Additional Information

Gene ID	1800
Other Names	MBD1; MDP; RDP; DPEP1_HUMAN; DPEP1; Beta-lactamase; Dehydropeptidase-I; Microsomal dipeptidase; Renal dipeptidase (hRDP); 3.4.13.19; dipeptidase 1; dipeptidase 1 (renal)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	DPEP1
Synonyms	MDP {ECO:0000303|PubMed:2303490}, RDP
Function	Hydrolyzes a wide range of dipeptides including the conversion of leukotriene D4 to leukotriene E4 (PubMed:2303490, PubMed:31442408, PubMed:32325220, PubMed:6334084). Hydrolyzes cystinyl- bis-glycine (cys-bis-gly) formed during glutathione degradation (PubMed:32325220). Also possesses beta lactamase activity and can hydrolyze the beta-lactam antibiotic imipenem (PubMed:32325220, PubMed:6334084).
Cellular Location	Apical cell membrane; Lipid-anchor, GPI-anchor. Cell projection, microvillus membrane; Lipid-anchor, GPI-anchor. Note=Brush border membrane {ECO:0000250|UniProtKB:P31429}
Tissue Location	Expressed in lung and kidneys.

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