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DPEP3 Rabbit pAb

Catalog # AP96813

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9H4B8
Other Accession	Q9H4B8
Predicted	Rat, Human, Mouse, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53687
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DPEP3
Epitope Specificity	301-400/488
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.
SUBUNIT	Homodimer; disulfide-linked (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a membrane-bound glycoprotein from thefamily of dipeptidases involved in hydrolytic metabolism of variousdipeptides, including penem and carbapenem beta-lactam antibiotics.This gene is located on chromosome 16 in a cluster with anothermember of this family. Alternatively spliced transcript variantsthat encode different isoforms have been found for this gene.[provided by RefSeq, Jul 2008].

Additional Information

Gene ID	64180
Other Names	MBD3; 1700018F16Rik; MBD-3; MLZ-136; DPEP3_HUMAN; DPEP3; DPEP3_MOUSE; Membrane-bound dipeptidase 3 (MBD-3); Protein expressed in male leptotene and zygotene spermatocytes 136 (MLZ-136); dipeptidase 3
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=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	DPEP3
Function	Lacks dipeptidase activity and is unable to hydrolyze cystinyl-bis-glycine, leukotriene D4 and the beta-lactam antibiotic imipenem (PubMed:32325220). The absence of activity may be due to the inability of asparagine (instead of aspartate found in DPEP1/2) at position 359 to function as the acid/base catalyst and activate the nucleophilic water/hydroxide (PubMed:32325220). A tyrosine (instead of histidine) at position 269 reduces affinity for the beta zinc and may cause substrate steric hindrance (PubMed:32325220).
Cellular Location	Membrane {ECO:0000250|UniProtKB:Q9DA79}; Lipid- anchor, GPI-anchor {ECO:0000250|UniProtKB:Q9DA79}

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