10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DPEP3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10789b

Product Information

Application	WB, E
Primary Accession	Q9H4B8
Other Accession	NP_001123230.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28639
Calculated MW	53687
Antigen Region	391-420

Additional Information

Gene ID	64180
Other Names	Dipeptidase 3, DPEP3
Target/Specificity	This DPEP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 391-420 amino acids from the C-terminal region of human DPEP3.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DPEP3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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}

Background

This gene encodes a membrane-bound glycoprotein from the family of dipeptidases involved in hydrolytic metabolism of various dipeptides, including penem and carbapenem beta-lactam antibiotics. This gene is located on chromosome 16 in a cluster with another member of this family. Alternatively spliced transcript variants that encode different isoforms have been found for this gene.

References

Sabatti, C., et al. Nat. Genet. 41(1):35-46(2009)
Clark, H.F., et al. Genome Res. 13(10):2265-2270(2003)
Habib, G.M., et al. FASEB J. 17(10):1313-1315(2003)