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

DPP8 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6506a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q6V1X1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17830
Calculated MW	103358
Antigen Region	23-52

Additional Information

Gene ID	54878
Other Names	Dipeptidyl peptidase 8, DP8, Dipeptidyl peptidase IV-related protein 1, DPRP-1, Dipeptidyl peptidase VIII, DPP VIII, Prolyl dipeptidase DPP8, DPP8, DPRP1
Target/Specificity	This DPP8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 23-52 amino acids from the N-terminal region of human DPP8.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	DPP8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DPP8 {ECO:0000303|PubMed:11012666, ECO:0000312|HGNC:HGNC:16490}
Function	Dipeptidyl peptidase that cleaves off N-terminal dipeptides from proteins

	having a Pro or Ala residue at position 2 (PubMed:11012666, PubMed:12534281, PubMed:12662155, PubMed:15039077, PubMed:15664838, PubMed:20536396, PubMed:29382749). Acts as a key inhibitor of caspase-1-dependent monocyte and macrophage pyroptosis in resting cells by preventing activation of NLRP1 and CARD8 (PubMed:27820798, PubMed:29967349, PubMed:32796818). Sequesters the cleaved C-terminal part of NLRP1 and CARD8, which respectively constitute the active part of the NLRP1 and CARD8 inflammasomes, in a ternary complex, thereby preventing their oligomerization and activation (PubMed:33731929, PubMed:33731932, PubMed:34019797). The dipeptidyl peptidase activity is required to suppress NLRP1 and CARD8; however, neither NLRP1 nor CARD8 are bona fide substrates of DPP8, suggesting the existence of substrate(s) required for NLRP1 and CARD8 inhibition (By similarity).
Cellular Location	Cytoplasm
Tissue Location	Ubiquitously expressed, with highest levels in testis, placenta, prostate, muscle and brain

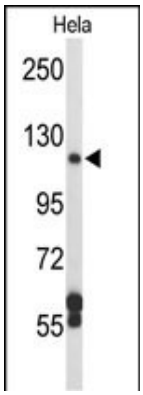
Background

DPP8 is a member of the peptidase S9B family, a small family of dipeptidyl peptidases that are able to cleave peptide substrates at a prolyl bond. The protein shares similarity with dipeptidyl peptidase IV in that it is ubiquitously expressed, and hydrolyzes the same substrates. These similarities suggest that, like dipeptidyl peptidase IV, this protein may play a role in T-cell activation and immune function.

References

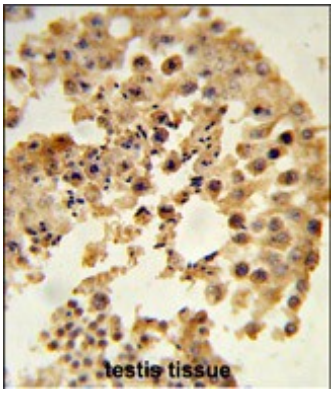
Ajami,K., FEBS Lett. 582 (5), 819-825 (2008)
Lee,H.J., J. Biol. Chem. 281 (50), 38653-38662 (2006)

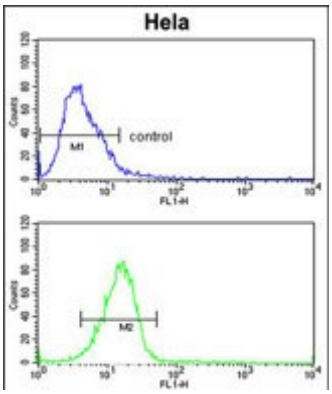
Images



Western blot analysis of DPP8 Antibody (N-term) (Cat. #AP6506a) in Hela cell line lysates (35ug/lane). DPP8 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human testis tissue reacted with DPP8 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





DPP8 Antibody (N-term) (Cat. #AP6506a) flow cytometric analysis of Hela cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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