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

KD-Validated Anti-DPP9 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI2031

Specification

KD-Validated Anti-DPP9 Mouse Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q86TI2
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG2b**
Calculated MW	**Predicted, 98 kDa, observed, 98 kDa KDa**
Gene Name	**DPP9**
Aliases	**DPP9; Dipeptidyl Peptidase 9; Dipeptidyl Peptidase-Like Protein 9; Dipeptidyl Peptidase IX; DPP IX; DPRP-2; DPLP9; DPRP2; DP9; Dipeptidyl Peptidase IV-Related Protein-2; Dipeptidyl Peptidase IV-Related Protein 2; Dipeptidylpeptidase 9; EC 3.4.14.5; IMD111; HATIS**
Immunogen	**Recombinant protein of human DPP9**

KD-Validated Anti-DPP9 Mouse Monoclonal Antibody - Additional Information

Gene ID	**91039**

Other Names
Dipeptidyl peptidase 9, DP9, 3.4.14.5, Dipeptidyl peptidase IV-related protein 2, DPRP-2, Dipeptidyl peptidase IX, DPP IX, Dipeptidyl peptidase-like protein 9, DPLP9, DPP9 {ECO:0000303|PubMed:12459266, ECO:0000312|HGNC:HGNC:18648}

KD-Validated Anti-DPP9 Mouse Monoclonal Antibody - Protein Information

Name DPP9 {ECO:0000303|PubMed:12459266, ECO:0000312|HGNC:HGNC:18648}

Function
Dipeptidyl peptidase that cleaves off N-terminal dipeptides from proteins having a Pro or Ala residue at position 2 (PubMed:12662155, PubMed:16475979, PubMed:19667070, PubMed:29382749, PubMed:30291141, PubMed:33731929, PubMed:36112693). 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:30291141, PubMed:<a

href="http://www.uniprot.org/citations/31525884" target="_blank">31525884, PubMed:32796818, PubMed:36112693, PubMed:36357533). 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 DPP9, suggesting the existence of substrate(s) required for NLRP1 and CARD8 inhibition (PubMed:33731929).

Cellular Location
[Isoform 1]: Cytoplasm, cytosol

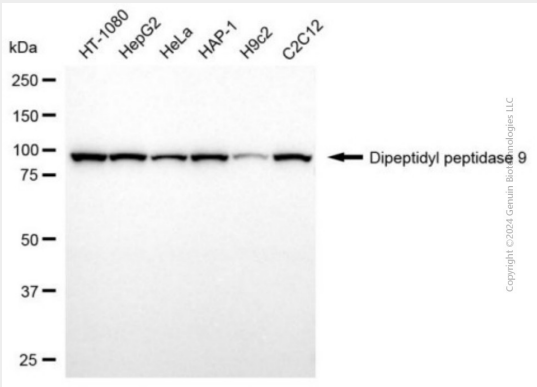
Tissue Location
Ubiquitously expressed, with highest levels in liver, heart and muscle, and lowest levels in brain

KD-Validated Anti-DPP9 Mouse Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

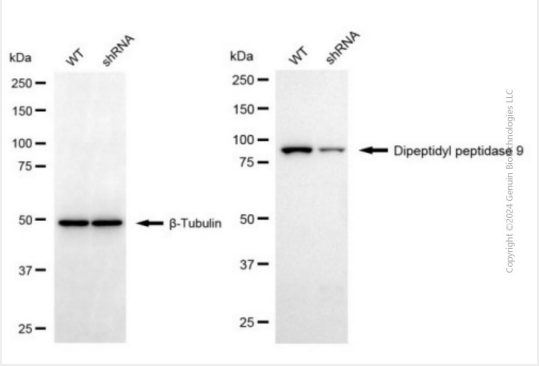
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-DPP9 Mouse Monoclonal Antibody - Images

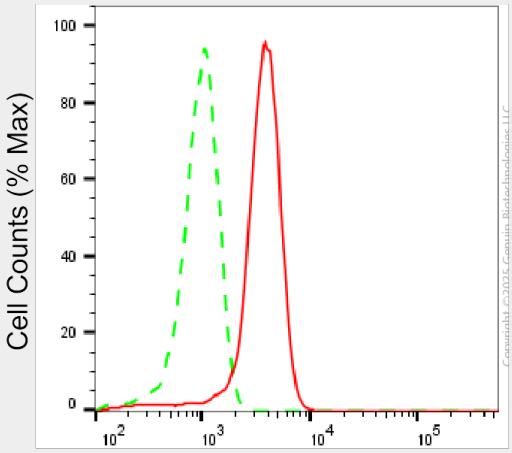


Western blotting analysis using anti-dipeptidyl peptidase 9 antibody (Cat#AGI2031). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-dipeptidyl peptidase 9 antibody (Cat#AGI2031, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.

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



Western blotting analysis using anti-dipeptidyl peptidase 9 antibody (Cat#AGI2031). Dipeptidyl peptidase 9 expression in wild type (WT) and dipeptidyl peptidase 9 (DPP9) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-dipeptidyl peptidase 9 antibody (Cat#AGI2031, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Flow cytometric analysis of Dipeptidyl peptidase 9 expression in HepG2 cells using anti-Dipeptidyl peptidase 9 antibody (Cat#AGI2031, 1:1,000). Green, isotype control; red, Dipeptidyl peptidase 9.