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# SAMD8 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12035a

## Product Information

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|---|---|
| **Application** | WB, E |
| **Primary Accession** | Q96LT4 |
| **Other Accession** | Q9DA37, NP_653261.1 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Rat, Bovine, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB31781 |
| **Calculated MW** | 48321 |
| **Antigen Region** | 38-67 |

## Additional Information

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| **Gene ID** | 142891 |
| **Other Names** | Sphingomyelin synthase-related protein 1, SMSr, 278-, Ceramide phosphoethanolamine synthase, CPE synthase, Sterile alpha motif domain-containing protein 8, SAM domain-containing protein 8, SAMD8 |
| **Target/Specificity** | This SAMD8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 38-67 amino acids from the N-terminal region of human SAMD8. |
| **Dilution** | WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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** | SAMD8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | SAMD8 ( HGNC:26320) |
| **Function** | Has phospholipase C (PLC) activity (PubMed: 33621517, PubMed:34332077, |

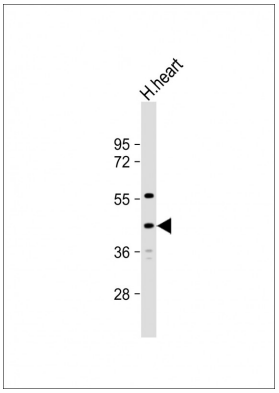
PubMed:38388831). Shows specificity for phosphatidylethanolamine (1,2-diacyl-sn-glycero-3-phosphoethanolamine, PE), hydrolyzing PE to produce phosphoethanolamine and diacylglycerol (1,2-diacyl-sn-glycerol, DAG) (PubMed:34332077). This reaction might act as a regulatory switch to activate serine palmitoyltransferase (SPT) and promote sphingolipid metabolism (By similarity). Can also function as a ceramide phosphoethanolamine (N-acylsphingoid 1- phosphoethanolamine, CPE) synthase when intracellular ceramide levels are elevated (PubMed:19506037, PubMed:38388831). Binds the headgroup from PE, which is smaller and more hydrophilic than the phosphocholine headgroup transferred in the canonical sphingomyelin synthesis (SMS) reaction by SMS1 or SMS2, and transfers it on to the primary hydroxyl of a ceramide in the lumen of the endoplasmic reticulum (PubMed:19506037, PubMed:38388831). Plays a role as a ceramide sensor, helping to regulate ceramide homeostasis in the endoplasmic reticulum, which is critical for maintaining the integrity of the early secretory pathway (PubMed:19506037).

**Cellular Location** Endoplasmic reticulum membrane; Multi-pass membrane protein

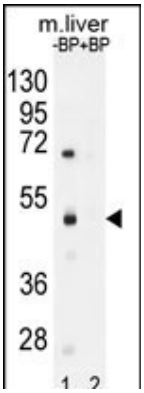
## References


Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006)
Barrios-Rodiles, M., et al. Science 307(5715):1621-1625(2005)
Huitema, K., et al. EMBO J. 23(1):33-44(2004)


## Images




Anti-SAMD8 Antibody (N-term) at 1:1000 dilution + human heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.




Western blot analysis of SAMD8 Antibody (N-term) Pab (Cat. #AP12035a) pre-incubated without(lane 1) and with(lane 2) blocking peptide in mouse liver tissue lysate. SAMD8 Antibody (N-term) (arrow) was detected using the purified Pab.


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