

GRAMD1A Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13980C**Specification**

GRAMD1A Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O96CP6
Other Accession	O3KR56 , O8VEF1 , NP_065946.2 , NP_001129671.1
Reactivity	Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	80680
Antigen Region	267-296

GRAMD1A Antibody (Center) - Additional Information**Gene ID** 57655**Other Names**

GRAM domain-containing protein 1A, GRAMD1A, KIAA1533

Target/Specificity

This GRAMD1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 267-296 amino acids from the Central region of human GRAMD1A.

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

GRAMD1A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

GRAMD1A Antibody (Center) - Protein Information**Name** GRAMD1A ([HGNC:29305](#))

Synonyms KIAA1533

Function Cholesterol transporter that mediates non-vesicular transport of cholesterol from the plasma membrane (PM) to the endoplasmic reticulum (ER) (By similarity). Contains unique domains for binding cholesterol and the PM, thereby serving as a molecular bridge for the transfer of cholesterol from the PM to the ER (By similarity). Plays a crucial role in cholesterol homeostasis and has the unique ability to localize to the PM based on the level of membrane cholesterol (By similarity). In lipid-poor conditions localizes to the ER membrane and in response to excess cholesterol in the PM is recruited to the endoplasmic reticulum-plasma membrane contact sites (EPCS) which is mediated by the GRAM domain (By similarity). At the EPCS, the sterol- binding VASt/ASTER domain binds to the cholesterol in the PM and facilitates its transfer from the PM to ER (By similarity). May play a role in tumor progression (By similarity). Plays a role in autophagy regulation and is required for biogenesis of the autophagosome (PubMed:[31222192](#)). This function in autophagy requires its cholesterol- transfer activity (PubMed:[31222192](#)).

Cellular Location

Endoplasmic reticulum membrane; Single-pass membrane protein. Cell membrane; Single-pass membrane protein. Cytoplasmic vesicle, autophagosome. Note=In lipid-poor conditions localizes to the ER membrane and is recruited to endoplasmic reticulum-plasma membrane contact sites (EPCS) in response to excess cholesterol in the PM (By similarity). Localizes to distinct EPCS than GRAMD2A and ESYT2/3 (PubMed:29469807). {ECO:0000250|UniProtKB:Q8VEF1, ECO:0000269|PubMed:29469807}

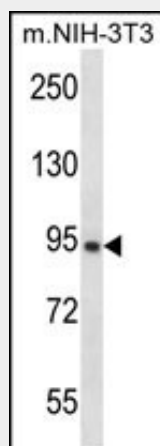
Tissue Location

Expressed in liver..

GRAMD1A Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GRAMD1A Antibody (Center) - Images

GRAMD1A Antibody (Center) (Cat. #AP13980c) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the GRAMD1A antibody detected the GRAMD1A protein (arrow).

GRAMD1A Antibody (Center) - Background

The exact function of this protein remains unknown.

GRAMD1A Antibody (Center) - References

Barbe, L., et al. Mol. Cell Proteomics 7(3):499-508(2008)
Olsen, J.V., et al. Cell 127(3):635-648(2006)