

GRAMD1A Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP13980c**Specification**

GRAMD1A Antibody (Center) Blocking peptide - Product InformationPrimary Accession [Q96CP6](#)**GRAMD1A Antibody (Center) Blocking peptide - Additional Information****Gene ID** 57655**Other Names**

GRAM domain-containing protein 1A, GRAMD1A, KIAA1533

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13980c was selected from the Center region of GRAMD1A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GRAMD1A Antibody (Center) Blocking peptide - 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:<a

[31222192](http://www.uniprot.org/citations/31222192)). This function in autophagy requires its cholesterol- transfer activity (PubMed:[31222192](http://www.uniprot.org/citations/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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

GRAMD1A Antibody (Center) Blocking peptide - Images**GRAMD1A Antibody (Center) Blocking peptide - Background**

The exact function of this protein remains unknown.

GRAMD1A Antibody (Center) Blocking peptide - References

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