

GATE16 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16026a

Product Information

Application	WB, E
Primary Accession	P60520
Other Accession	P60522 , P60521 , P60519 , NP_009216.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34911
Calculated MW	13667
Antigen Region	1-28

Additional Information

Gene ID	11345
Other Names	Gamma-aminobutyric acid receptor-associated protein-like 2, GABA(A) receptor-associated protein-like 2, Ganglioside expression factor 2, GEF-2, General protein transport factor p16, Golgi-associated ATPase enhancer of 16 kDa, GATE-16, MAP1 light chain 3-related protein, GABARAPL2, FLC3A, GEF2
Target/Specificity	This GATE16 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-28 amino acids from the N-terminal region of human GATE16.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	GATE16 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GABARAPL2 (HGNC:13291)
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Synonyms	FLC3A, GEF2
Function	Ubiquitin-like modifier involved in intra-Golgi traffic (By similarity). Modulates intra-Golgi transport through coupling between NSF activity and SNAREs activation (By similarity). It first stimulates the ATPase activity of NSF which in turn stimulates the association with GOSR1 (By similarity). Involved in autophagy (PubMed: 20418806 , PubMed: 23209295). Plays a role in mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production (PubMed: 20418806 , PubMed: 23209295). Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation (PubMed: 20418806 , PubMed: 23209295).
Cellular Location	Cytoplasmic vesicle, autophagosome. Endoplasmic reticulum membrane. Golgi apparatus {ECO:0000250 UniProtKB:P60519}
Tissue Location	Ubiquitous. Expressed at high levels in the brain, heart, prostate, ovary, spleen and skeletal muscle. Expressed at very low levels in lung, thymus and small intestine

Background

Involved in intra-Golgi traffic. Modulates intra-Golgi transport through coupling between NSF activity and SNAREs activation. It first stimulates the ATPase activity of NSF which in turn stimulates the association with GOSR1 (By similarity).

References

Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010) :
 Dastani, Z., et al. Eur. J. Hum. Genet. 18(3):342-347(2010)
 Thielmann, Y., et al. Proteins 77(3):637-646(2009)
 Kirkin, V., et al. Mol. Cell 33(4):505-516(2009)
 Shvets, E., et al. Autophagy 4(8):1054-1056(2008)

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