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GABARAP Rabbit mAb

Catalog # AP77763

Product Information

Application	WB, IHC-P, IF, FC, ICC
Primary Accession	O95166
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human GABARAP
Purification	Affinity Chromatography
Calculated MW	13918

Additional Information

Gene ID	11337
Other Names	GABARAP
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	GABARAP {ECO:0000303|PubMed:34597140, ECO:0000312|HGNC:HGNC:4067}
Function	Ubiquitin-like modifier that plays a role in intracellular transport of GABA(A) receptors and its interaction with the cytoskeleton (PubMed:9892355). Involved in autophagy: while LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation (PubMed:15169837, PubMed:20562859, PubMed:22948227, PubMed:34597140). Through its interaction with the reticulophagy receptor TEX264, participates in the remodeling of subdomains of the endoplasmic reticulum into autophagosomes upon nutrient stress, which then fuse with lysosomes for endoplasmic reticulum turnover (PubMed:31006538). Participates in selective ER-phagy through interaction with UBAC2, promoting recruitment of UBAC2-associated ER fragments to autophagosomes (PubMed:39284914). In addition to autophagy, also regulates lysosome biogenesis via interaction with

FNIP1 (or FNIP2): interaction sequesters the FLCN-FNIP complex and prevents non-canonical mTORC1 signaling cascade activation, leading to activation of transcription factors TFEB and TFE3 (PubMed:39423796, PubMed:34597140). Also required for the local activation of the CUL3(KBTBD6/7) E3 ubiquitin ligase complex, regulating ubiquitination and degradation of TIAM1, a guanyl-nucleotide exchange factor (GEF) that activates RAC1 and downstream signal transduction (PubMed:25684205). Thereby, regulates different biological processes including the organization of the cytoskeleton, cell migration and proliferation (PubMed:25684205). Involved in apoptosis (PubMed:15977068).

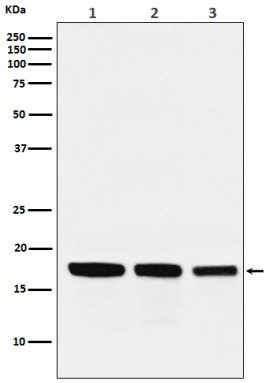
Cellular Location

Cytoplasmic vesicle, autophagosome membrane. Endomembrane system {ECO:0000250|UniProtKB:P60517}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P60517}. Golgi apparatus membrane {ECO:0000250|UniProtKB:P60517}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:P60517}. Note=Largely associated with intracellular membrane structures including the Golgi apparatus and postsynaptic cisternae. Colocalizes with microtubules (By similarity) Also localizes to discrete punctae along the ciliary axoneme (By similarity). {ECO:0000250|UniProtKB:P60517, ECO:0000250|UniProtKB:Q9DCD6}

Tissue Location

Heart, brain, placenta, liver, skeletal muscle, kidney and pancreas.

Images



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