

GABARAP Antibody

Rabbit mAb Catalog # AP91484

Specification

GABARAP Antibody - Product Information

WB, IHC, FC, ICC Application

Primary Accession 095166 Reactivity Rat

Monoclonal Clonality

Other Names

GABARAP; GABARAPL1; GABARAPL2;

Isotype Rabbit IgG Host **Rabbit** Calculated MW 13918 Da

GABARAP Antibody - Additional Information

Dilution WB~~1:1000

> IHC~~1:100~500 FC~~1:10~50 ICC~~N/A

Purification **Affinity-chromatography**

Immunogen A synthesized peptide derived from human

GABARAP

Description **GABARAP** is cleaved at its carboxyl

terminus, which leads to conjugation by

either of the phospholipids phosphatidylethanolamine or

phosphatidylserine. This processing converts GABARAP from a type I to a type

II membrane bound form involved in

autophagosome biogenesis. Processing of **GABARAP** involves cleavage by Atg4 family members followed by conjugation by the E1 and E2 like enzymes Atg7 and Atg3. Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

GABARAP Antibody - Protein Information

Name GABARAP (HGNC:4067)

Storage Condition and Buffer

Synonyms FLC3B



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). 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). 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.

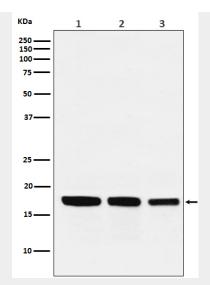
GABARAP Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

GABARAP Antibody - Images





Western blot analysis of GABARAP expression in (1) HepG2 cell lysate; (2) Mouse kidney lysate; (3) Rat heart lysate.