

Summary

Production Name	GABARAP (11T4) Rabbit Monoclonal Antibody	
Description	Rabbit Monoclonal Antibody	
Host	Rabbit	
Application	WB,ELISA	
Reactivity	Human, Mouse, Rat	

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New typepreservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term.Avoid freeze / thaw cycle.
Purification	Affinity purification

Immunogen

Gene Name	GABARAP
Alternative Names	GABARAP; GABARAPL1; GABARAPL2;
Gene ID	11337.0
SwissProt ID	O95166 .

Application

Dilution Ratio	WB 1:500-1:2000
Molecular Weight	14kDa

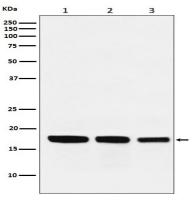


Background

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. 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 activition 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: http://www.uniprot.org/citations/25684205" target=" blank">25684205). Involved in apoptosis (PubMed:15977068).

Research Area

Image Data



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



Note

For research use only.