

# GABARAPL1 Antibody

Catalog # ASM10506

#### Specification

# GABARAPL1 Antibody - Product Information

Application Primary Accession	ICC/IF, WB 09H0R8
Other Accession	<u>NP_113600.1</u>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Description	-
Rabbit Anti-Human GABARAPL1 Polyclonal	

**Target/Specificity** Detects ~14-16kDa. Other observed bands at ~32kDa.

**Other Names** APG8 like Antibdoy, ATG8 Antibody, GABA(A) Receptor Associated Protein Like 1 Antibody, Glandular epithelial cell protein 1 Antibody

Immunogen Synthetic peptide from the C-terminal of human GABARAPL1

Purification Peptide Affinity Purified

Storage Storage Buffer PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature Blue Ice or 4°C Certificate of Analysis A 1:1000 dilution of SPC-623 was sufficient for detection of GABARAPL1 on rat liver lysates using Goat anti-rabbit IgG:HRP as the secondary antibody.

-20ºC

**Cellular Localization** Cytoplasm | Cytoskeleton | Endoplasmic Reticulum | Golgi Apparatus | Cytoplasmic Vesicle | Autophagosome

## GABARAPL1 Antibody - Protocols

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

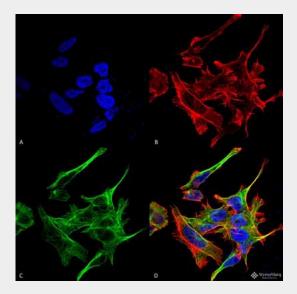
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence



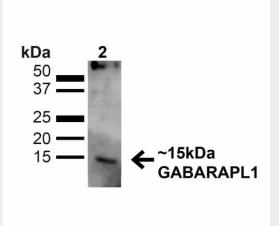
Immunoprecipitation

- Flow Cytomety
- <u>Cell Culture</u>

**GABARAPL1** Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-GABARAPL1 Polyclonal Antibody (ASM10506). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-GABARAPL1 Polyclonal Antibody (ASM10506) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Rabbit ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cytoplasm, Cytoskeleton. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) GABARAPL1 Antibody (D) Composite.



Western blot analysis of Human HeLa cell lysates showing detection of ~14kDa GABARAPL1 protein using Rabbit Anti-GABARAPL1 Polyclonal Antibody (ASM10506). Lane 1: MW Ladder. Lane 2: Human HeLa (20  $\mu$ g). Load: 20  $\mu$ g. Block: 5% milk + TBST for 1 hour at RT. Primary Antibody: Rabbit Anti-GABARAPL1 Polyclonal Antibody (ASM10506) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit: HRP at 1:2000 for 1 hour at RT. Color Development: TMB solution for 12 min at RT. Predicted/Observed Size: ~14kDa.



## GABARAPL1 Antibody - Background

GABARAPL1, one of the proteins belonging to the GABARAP (GABA(A) receptor-associated protein) family, is highly expressed in the central nervous system and implicated in processes such as receptor and vesicle transport as well as autophagy. The proteins that make up the GABARAP family demonstrate conservation of their amino acid sequences and protein structures. In humans, GABARAPL1 shares 86% identity with GABARAP and 61% with GABARAPL2 (GATE-16) (1). GABARAPL1, or GABA(A) Receptor-Associated Protein Like 1, is a ubiquitin-like modifier that increases cell-surface expression of kappa-type opioid receptor through facilitating anterograde intracellular trafficking of the receptor. Involved in formation of autophagosomal vacuoles. Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation (2).

#### **GABARAPL1 Antibody - References**

1. Le Grand J.N., at al. (2011) Autophagy. 7(11): 1302-1307. 2. Tanida S., et al. (2006) FEBS J. 273(11): 2553-2562.