

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat GATE-16 in Western blot.
Source	Monoclonal Rat IgG _{2B} Clone # 853746
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human GATE16 Accession # P60520
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Golgi-associated ATPase Enhancer of 16 kDa (GATE-16), also known as Apg8p2 and GABARAPL2, is a 117 amino acid (aa) polypeptide and a member of the Autophagy-related 8 (Atg8) family of proteins (1). GATE-16/Apg8p2 has 100% aa sequence identity with its mouse and rat orthologs, and is orthologous to the yeast Atg8. Atg8 family members show structural similarity with Ubiquitin, but lack aa sequence similarity. GATE-16/Apg8p2 is best known for its role in autophagy (2,3). GATE-16/Apg8p2 covalently attaches to phosphatidylethanolamine (PE) the phagophore (autophagosome precursor) membrane using a Ubiquitin-like conjugation system that includes Ubiquitin-activating (E1)-, Ubiquitin-conjugating (E2)-, and Ubiquitin Ligase (E3)-like enzymes. Here it is involved in the later stages of autophagosome formation (4,5). It may also be involved in cargo recruitment to autophagosomes (1).

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