

Anti-APG12 (RABBIT) Antibody
APG12 Antibody
Catalog # ASR4393

Specification

Anti-APG12 (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Yeast
Reactivity	Yeast
Clonality	Polyclonal
Application	WB, E, I, LCI
Application Note	This purified polyclonal antibody reacts yeast APG12 by western blot and ELISA. Although not tested, this antibody is likely functional in immunohistochemistry and immunoprecipitation. This antibody using the specified conditions may recognize other prominent intrinsic bands (UBLs or their conjugates). Other intrinsic bands are readily detectable in yeast lysates at lower antibody dilutions.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This purified antibody was prepared from rabbit serum after repeated immunizations with recombinant yeast APG12 protein.
Reconstitution Volume	100 µL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Preservative	0.01% (w/v) Sodium Azide

Anti-APG12 (RABBIT) Antibody - Additional Information

Gene ID 852518

Other Names
852518

Purity

This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum.

Storage Condition

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted

liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-APG12 (RABBIT) Antibody - Protein Information

Name ATG12

Synonyms APG12

Function

Ubiquitin-like protein involved in cytoplasm to vacuole transport (Cvt), autophagy vesicles formation, mitophagy, and nucleophagy. Conjugation with ATG5 through a ubiquitin-like conjugating system involving also ATG7 as an E1-like activating enzyme and ATG10 as an E2-like conjugating enzyme, is essential for its function. The ATG12-ATG5 conjugate acts as an E3-like enzyme which is required for lipidation of ATG8 and ATG8 association to the vesicle membranes. ATG12-ATG5 rearranges the ATG3 catalytic center and enhances its E2 activity.

Cellular Location

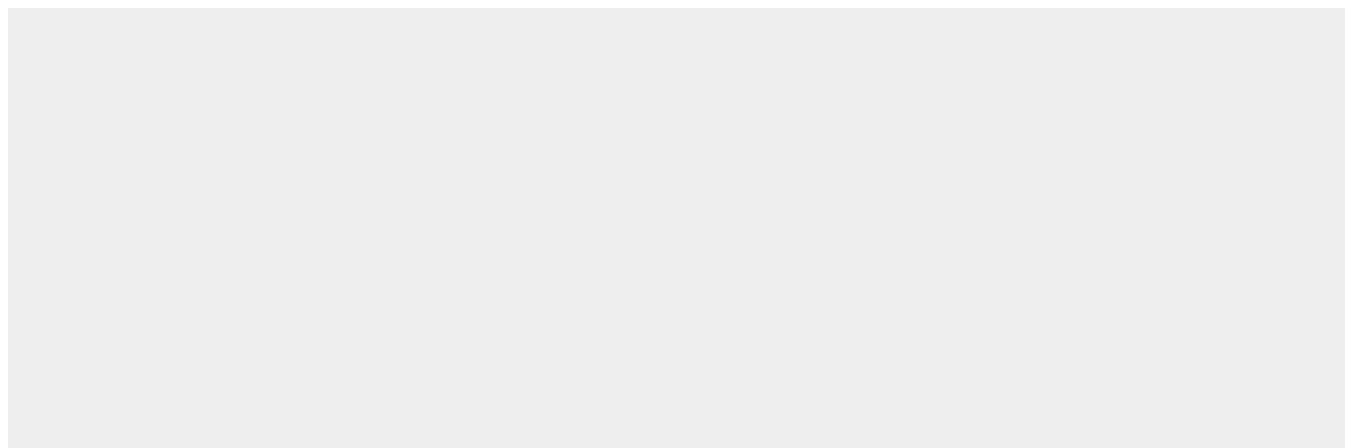
Preautophagosomal structure membrane; Peripheral membrane protein. Note=Localizes to the isolation membrane (IM), a membrane sac which is generated from the pre-autophagosomal structure (PAS). Ultimately, the IM expands to become a mature autophagosome. Localizes also to a dot at the junction between the IM and the vacuolar membrane, termed the vacuole-IM contact site (VICS)

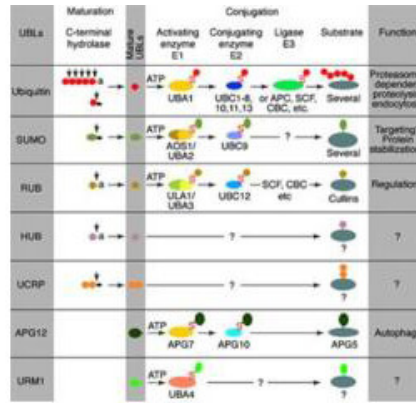
Anti-APG12 (RABBIT) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-APG12 (RABBIT) Antibody - Images





Anti-APG12 Antibody Anti-APG12 is highly specific and does not cross react with other UBLs.

Anti-APG12 (RABBIT) Antibody - Background

Ubiquitin-like proteins fall into two classes: the first class, ubiquitin-like modifiers (UBLs) function as modifiers in a manner analogous to that of ubiquitin. Examples of UBLs are SUMO, Rub1 (also called Nedd8), Apg8 and Apg12. Proteins of the second class include parkin, RAD23 and DSK2, are designated ubiquitin-domain proteins (UDPs). These proteins contain domains that are related to ubiquitin but are otherwise unrelated to each other. In contrast to UBLs, UDPs are not conjugated to other proteins. In yeast, autophagy, the delivery of cytoplasmic components to the lysosome/vacuole for degradation, requires a ubiquitin-like protein conjugation system, in which Apg12 is covalently bound to Apg12-Apg5 and Apg16.