

**Datasheet for 200-401-437****APG12 Antibody****Overview**

|                      |                                            |
|----------------------|--------------------------------------------|
| <b>Description:</b>  | Anti-APG12 (RABBIT) Antibody - 200-401-437 |
| <b>Item No.:</b>     | 200-401-437                                |
| <b>Size:</b>         | 500 µg                                     |
| <b>Applications:</b> | ELISA, WB                                  |
| <b>Reactivity:</b>   | Yeast                                      |
| <b>Host Species:</b> | Rabbit                                     |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | 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. |
| <b>Synonyms:</b>     | rabbit anti-APG12 antibody, APG-12, APG 12, ATG-12, ATG 12, APG12-like antibody, APG12L antibody, ATG12 antibody, ATG12 autophagy related 12 homolog ( <i>S. cerevisiae</i> ) antibody, ATG12 autophagy related 12 homolog antibody, Autophagy 12 antibody, Autophagy-related protein 12 antibody, HAPG12 antibody                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**Target Details**

|                        |                     |
|------------------------|---------------------|
| <b>Gene Name:</b>      | ATG12               |
| <b>Reactivity:</b>     | Yeast               |
| <b>Immunogen Type:</b> | Recombinant Protein |

|                            |                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | This purified antibody was prepared from rabbit serum after repeated immunizations with recombinant yeast APG12 protein.                                                                                                                                                                                                                            |
| <b>Purity/Specificity:</b> | 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. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P38316</a></li><li>• <a href="#">NCBI - 6319694</a></li><li>• <a href="#">GeneID - 852518</a></li></ul>                                                                                                                                                                             |

## Application Details

|                             |                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <b>Tested Applications:</b> | ELISA, WB                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Application Note:</b>    | 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. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                            |
| <b>ELISA:</b>               | 1:1,000 - 1:5,000                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>WB:</b>                  | 1:500 - 1:2,000                                                                                                                                                                                                                                                                                                                                                                                            |

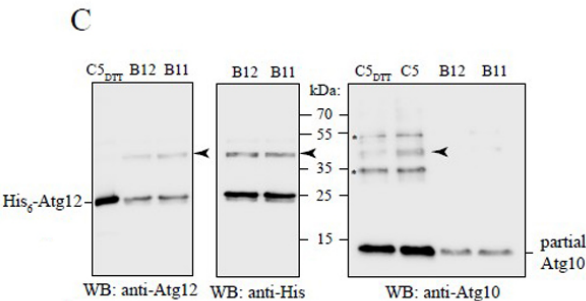
## Formulation

|                               |                                                            |
|-------------------------------|------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                |
| <b>Concentration:</b>         | 5.0 mg/mL by UV absorbance at 280 nm                       |
| <b>Buffer:</b>                | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>          | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>            | None                                                       |
| <b>Reconstitution Volume:</b> | 100 µL                                                     |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)               |

## Shipping & Handling

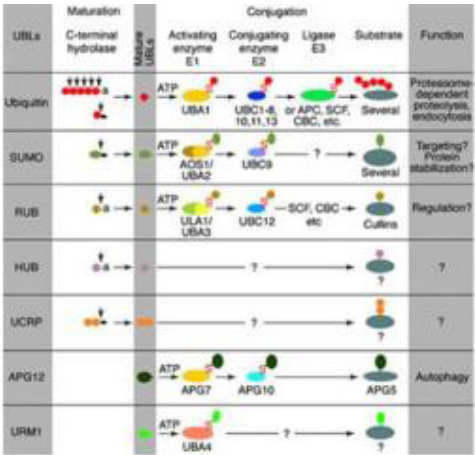
|                     |                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shipping Condition: | Ambient                                                                                                                                                                                                                                                                                                                                         |
| 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. |
| Expiration:         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                           |

Images



Western Blot

C Western blot analysis of the C5 fraction from the anion exchange chromatography and B12 and B11 fractions from the SEC. C5DTT is the C5 fraction supplemented with 100 mM DTT. Black arrows mark the Atg10–Atg12 thioester conjugate of 42 kDa (Atg10, 20 kDa; Atg12, 22 kDa) that is sensitive to DTT. Asterisks denote nonspecific bands. Supplementary Figure S3. PMID: 37894717



Pathway

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

References

- Popelka H et al. The Intrinsically Disordered N Terminus in Atg12 from Yeast Is Necessary for the Functional Structure of the Protein. *Int J Mol Sci.* (2023)

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.