

**Datasheet for 200-401-427****Rub1 Antibody****Overview**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | Anti-Rub1 (RABBIT) Antibody - 200-401-427 |
| <b>Item No.:</b>     | 200-401-427                               |
| <b>Size:</b>         | 500 µg                                    |
| <b>Applications:</b> | WB                                        |
| <b>Reactivity:</b>   | Yeast                                     |
| <b>Host Species:</b> | Rabbit                                    |

**Product Details****Background:**

Ubiquitin-like proteins fall into two classes: the first class, ubiquitin-like modifiers (UBL's) function as modifiers in a manner analogous to that of ubiquitin. Examples of UBL's are SUMO, Rub1 (also called Nedd8), Apg12, and Hub1. Proteins of the second class include parkin, RAD23, and DSK2, and are designated ubiquitin-domain proteins (UDP's). These proteins contain domains that are related to ubiquitin but are otherwise unrelated to each other. In contrast to UBL's, UDP's are not proteolytically processed or conjugated to other proteins. Rub1, and the corresponding human homolog Nedd8, are activated by the E1 ubiquitin-activating enzyme UBA2, which forms isopeptide linkages between thioesters. Nedd8 shows 80% homology to ubiquitin. The best known targets of Rub1 modification are members of the cullin family. Cullins are subunits of an E3-ubiquitin ligase complex called the Skp1/Cul1/Cdc53-F-box (SCF). The SCF promotes transfer of ubiquitin from a ubiquitin conjugating enzyme (E2) to the target protein. Rub1 modification may regulate SCF function or localization.

|                      |                                                                                   |
|----------------------|-----------------------------------------------------------------------------------|
| <b>Synonyms:</b>     | rabbit anti-Rub1 antibody, NEDD8-like protein RUB-1, Ubiquitin-like protein RUB 1 |
| <b>Host Species:</b> | Rabbit                                                                            |
| <b>Clonality:</b>    | Polyclonal                                                                        |
| <b>Format:</b>       | IgG                                                                               |

**Target Details**

|                    |       |
|--------------------|-------|
| <b>Gene Name:</b>  | RUB1  |
| <b>Reactivity:</b> | Yeast |

|                            |                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen Type:</b>     | Recombinant Protein                                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen:</b>          | Rub1 Antibody was prepared from rabbit serum after repeated immunizations with full-length recombinant yeast Rub1 protein.                                                                                                                                                                                                                           |
| <b>Purity/Specificity:</b> | Rub1 Antibody 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 - Q03919</a></li><li>• <a href="#">NCBI - Q03919.1</a></li><li>• <a href="#">GeneID - 851717</a></li></ul>                                                                                                                                                                             |

## Application Details

|                             |                                                                                                                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | WB                                                                                                                                                                                        |
| <b>Application Note:</b>    | Rub1 Antibody is tested in western blot and detects a 6 kDa band corresponding to yeast Rub1. Most yeast cell lysates can be used as a positive control without induction or stimulation. |
| <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>         | 1.0 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> | 500 µL                                                     |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)               |

## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Ambient |
|----------------------------|---------|

|                           |                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Condition:</b> | 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. |
| <b>Expiration:</b>        | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                           |

## Images



### Western Blot

Anti-Rub1 antibody, generated by immunization with full-length, recombinant yeast Rub1, was tested by western blot against a yeast cell lysate. A dilution of the antibody between 1:200 and 1:1,000 will show strong reactivity specifically with free Rub1 protein (indicated by arrow) and Rub1 conjugates. In this blot, the antibody was used at a 1:500 dilution and was incubated overnight at 4° C in 5% non-fat dry milk in TTBS. Detection occurred using a 1:2000 dilution of HRP-labeled Donkey anti-Rabbit IgG (code # 611-703-127) for 1 hour at room temperature. A chemiluminescence system was used for signal detection (Roche). Other detection systems will yield similar results.

## Disclaimer

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