10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Rub1 (RABBIT) Antibody
Rub1 Antibody
Catalog # ASR4388

Specification

Anti-Rub1 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Yeast**
Reactivity	**Yeast**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**Rub1 Antibody is tested in western blot and defects a 6 kDa band corresponding to yeast Rub1. Most yeast cell lysates can be used as a positive control without induction or stimulation.**
Physical State	**Lyophilized**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Rub1 Antibody was prepared from rabbit serum after repeated immunizations with full-length recombinant yeast Rub1 protein.**
Reconstitution Volume	**500 µL**
Reconstitution Buffer	**Restore with deionized water (or equivalent)**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Rub1 (RABBIT) Antibody - Additional Information

Gene ID 851717

Other Names
851717

Purity
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.

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.

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Anti-Rub1 (RABBIT) Antibody - Protein Information

Name RUB1

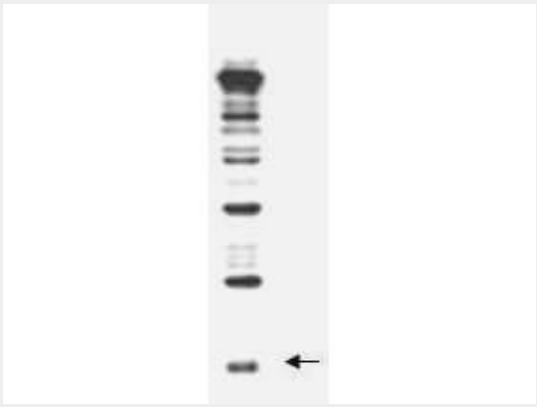
Function
Ubiquitin-like protein modifier that can be covalently attached to lysine residues of target proteins. Activated by the dimeric UBA3-ULA1 E1 enzyme and conjugated by the E2 UBC12 to substrate proteins. RUB1-conjugated (neddylated) substrate proteins include the cullins CDC53, RTT101 and CUL3, and the modification enhances the ubiquitin-ligase activity of the corresponding cullin-RING-based E3 ubiquitin-protein ligase complexes (CRLs).

Anti-Rub1 (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 Cytomety
- Cell Culture

Anti-Rub1 (RABBIT) Antibody - Images



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.

Anti-Rub1 (RABBIT) Antibody - 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.