

Datasheet for 200-401-431S**Ubiquitin Antibody****Overview**

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| Description: | Anti-UBIQUITIN (RABBIT) Antibody - 200-401-431S |
| Item No.: | 200-401-431S |
| Size: | 25 µL |
| Applications: | ELISA, WB |
| Reactivity: | Broad |
| Host Species: | Rabbit |

Product Details

Background: Ubiquitin (Ub) is a small, 76-residue, protein (8.5 kDa) found both as free monomer and covalently attached to itself and other proteins in eukaryotic cells. Free Ub is a very compact and stable molecule that is easily refolded after being denatured. It is therefore recommended that for detection of free Ub on Westerns, the Tris-Tricine SDS-PAGE is used and nitrocellulose filters are autoclaved after the transfer and before blocking and addition of anti-Ub antibodies. The C-terminus of ubiquitin forms an isopeptide bond with the ε-amino group of a lysine side chain in a target protein. In this way proteins can be covalently modified by the addition of ubiquitin which may alter the target protein's function. Monoubiquitination generally targets proteins for internalization, endocytosis and lysosomal degradation, or modifies the surface charge of histones and affects chromatin compaction. Conjugation of ubiquitin (Ub) involves a three-step mechanism whereby specific enzymes (or enzyme complexes) activate and covalently link Ub to their substrates.

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| Synonyms: | rabbit anti-Ubiquitin Antibody, FLJ25987 antibody, MGC8385 antibody, Polyubiquitin B antibody, RPS27A antibody, UBA52 antibody, UBA80 antibody, UBB antibody, UBC antibody, UBCEP1 antibody |
| Host Species: | Rabbit |
| Clonality: | Polyclonal |
| Format: | IgG |

Target Details

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| Gene Name: | UBB |
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| Reactivity: | Broad |
| Immunogen Type: | Native Protein |
| Immunogen: | This purified antibody was prepared from rabbit serum after repeated immunizations with ubiquitin coupled to rabbit IgG using glutaraldehyde. |
| Purity/Specificity: | 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. |
| Relevant Links: | <ul style="list-style-type: none">• UniProtKB - P0CG47• NCBI - NP_001268645.1• GeneID - 7314 |

Application Details

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| Tested Applications: | ELISA, WB |
| Application Note: | This purified polyclonal antibody reacts with ubiquitin by ELISA and western blot. Although not tested, this antibody is likely functional in immunohistochemistry and immunoprecipitation. For detection of free Ub by western blotting use Tris-Tricine SDS-PAGE and autoclaved nitrocellulose filters after the transfer and before blocking and addition of anti-Ub antibodies. Details on western blotting procedures are found in Mimnaugh et al., (1999 and 2002). |
| Assay Dilutions: | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| ELISA: | 1:1,000 - 1:5,000 |
| IHC: | User Optimized |
| WB: | 1:200 - 1:1000 |

Formulation

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| Physical State: | Liquid (sterile filtered) |
| Concentration: | 5.0 mg/mL by UV absorbance at 280 nm |
| Buffer: | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| Preservative: | 0.01% (w/v) Sodium Azide |
| Stabilizer: | None |

Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Anti-Ubiquitin antibody, generated by immunization with Ubiquitin coupled to Rabbit IgG, was tested by western blot against total cell extract from yeast. Dilution of the antibody between 1:200 and 1:1,000 showed strong reactivity with Ubiquitinated proteins. In this blot the antibody was used at a 1:500 dilution 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 chemi-luminescence system was used for signal detection (Roche). Other detection systems will yield similar results.

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.