

**Datasheet for 500-301-F86****KDEL Receptor Antibody****Overview**

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| <b>Description:</b>  | Anti-KDEL Receptor (MOUSE) Monoclonal Antibody - 500-301-F86   |
| <b>Item No.:</b>     | 500-301-F86  |
| <b>Size:</b>         | 100 µg   |
| <b>Applications:</b> | IF, IHC, IP, WB  |
| <b>Reactivity:</b>   | Human, Mouse, Rat, Bovine, Chicken, D. melanogaster, Dog, Hamster, Monkey, Pig, Rabbit, Sheep, Xenopus |
| <b>Host Species:</b> | Mouse  |

**Product Details**

|                      |  |
|----------------------|--|
| <b>Background:</b>   | The endoplasmic reticulum is part of a protein sorting pathway, or in essence, the transportation system of the eukaryotic cell. The majority of endoplasmic reticulum resident proteins are retained in the endoplasmic reticulum through a retention motif. This motif is composed of four amino acids at the C-terminal end of the protein sequence. The most common retention sequence is KDEL (lys-asp-glu-leu). However, variation on KDEL does occur and other sequences can also give rise to endoplasmic reticulum retention. There are three KDEL receptors in mammalian cells, all have a very high degree of sequence identity; and all are located within the cis-Golgi and its intermediate compartments. In terms of function, KDEL receptors interact with GAP (GTPase-activating protein) of ARF1, which is involved in COPI dependent vesicle transport, and the KDEL receptor may also be responsible for the recruitment of this ARF1 to membranes which can then aid in the regulation of vesicle budding. It is also important to note that the KDEL receptor exhibits extensive sequence identity o yeast protein Erd2p, which is a receptor for the yeast ER retention signal. |
| <b>Synonyms:</b>     | mouse anti-KDEL Receptor Antibody, ERD2, ERD2.1, ERD21, HDEL, KDEL, KDEL R1, KDELR1, PM23, Lys Asp Glu Leu, K-D-E-L, ER lumen protein retaining receptor 1, KDEL endoplasmic reticulum protein retention, Kdelr1   |
| <b>Host Species:</b> | Mouse  |
| <b>Clonality:</b>    | Monoclonal   |
| <b>Clone ID:</b>     | KR-10  |
| <b>Format:</b>       | ASCITES  |

## Target Details

|                            |  |
|----------------------------|--|
| <b>Gene Name:</b>          | KDEL1  |
| <b>Reactivity:</b>         | Human, Mouse, Rat, Bovine, Chicken, D. melanogaster, Dog, Hamster, Monkey, Pig, Rabbit, Sheep, Xenopus   |
| <b>Immunogen Type:</b>     | Conjugated Peptide   |
| <b>Immunogen:</b>          | KDEL Receptor Antibody was produced in mice by repeated immunizations raised against a 21 residue synthetic peptide based on the bovine KDEL receptor and the synthetic peptide coupled to KLH.  |
| <b>Purity/Specificity:</b> | Anti-KDEL Antibody is clarified mouse ascites fluid. A BLAST analysis was used to suggest cross-reactivity with KDEL from Human, Monkey, Rat, Mouse, Hamster, Rabbit, Pig, Bovine, Sheep, Canine, Chicken, Drosophila, and Xenopus based on 100% homology with the immunizing sequence. Cross-reactivity with KDEL from other sources has not been determined. Chaperones, Organelle Markers research. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">NCBI - NP_001069963.1</a></li><li>• <a href="#">GeneID - 618184</a></li><li>• <a href="#">UniProtKB - P33946</a></li></ul>   |

## Application Details

|                             |  |
|-----------------------------|--|
| <b>Tested Applications:</b> | IF, IHC, IP, WB  |
| <b>Application Note:</b>    | Anti-KDEL Antibody is tested for WB and IF microscopy and suitable for IP and IHC. Expect a band approximately ~25kDa protein corresponding to the molecular mass of KDEL on SDS-PAGE immunoblots. Specific conditions for reactivity should be optimized by the end user. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.  |
| <b>WB:</b>                  | 1:1000   |

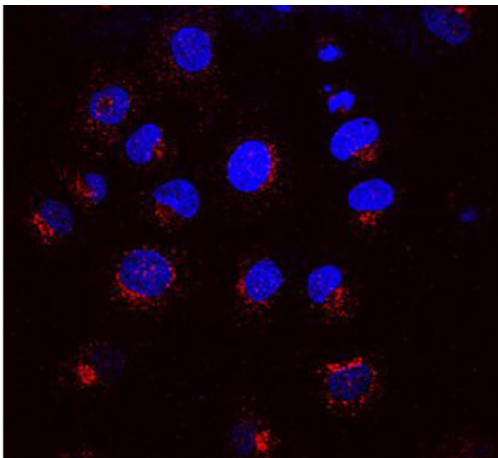
## Formulation

|                        |  |
|------------------------|--|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <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>   | 0.09% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | 50% (v/v) Glycerol   |

## Shipping & Handling

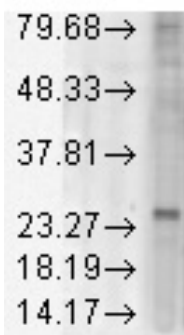
|                            |   |
|----------------------------|---|
| <b>Shipping Condition:</b> | Wet Ice   |
| <b>Storage Condition:</b>  | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge 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



### Immunofluorescence Microscopy

Immunofluorescence of mouse anti-KDEL antibody. Tissue: NRK cells. Antigen retrieval: not required. Primary Antibody: KDEL at 1ug/ml for 1h at RT. Secondary antibody: Fluorescein Anti-Mouse secondary at 1:10,000 for 45 min at RT. Localization: Endoplasmic Reticulum cytoplasmic. Staining: KDEL as red fluorescent signal with DAPI blue counterstain.



### Western Blot

Western Blot of mouse anti-KDEL antibody. Lane 1: Rat Tissue Lysate. Primary antibody: KDEL antibody at 1:1000 for overnight at 4°C. Secondary antibody: Goat anti-mouse IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Blotto overnight 4°C. Predicted/Observed size: 24.5 kDa/25 kDa for KDEL total. Other band(s): none.

## 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.