



Product datasheet

Anti-KDEL antibody ab2898

★★★★★ [1 Abreviews](#) [4 References](#) [5 Images](#)

Overview

Product name	Anti-KDEL antibody
Description	Rabbit polyclonal to KDEL
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt, ICC/IF, IHC-P
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide corresponding to Rat KDEL aa 643-654. Sequence: TGEEDTSEKDEL <div>  Run BLAST with  Run BLAST with </div>
Positive control	IHC: Mouse lymph node, pancreas and liver tissues. ICC/IF: human U251 cells Flow Cyt: human HeLa cells
General notes	<p>This antibody can be used as an endoplasmic reticulum (ER) marker.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: 99% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab2898 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use a concentration of 1 - 20 µg/ml.
ICC/IF		Use at an assay dependent concentration.
IHC-P	★★★★★ (1)	1/100 - 1/200.

Target

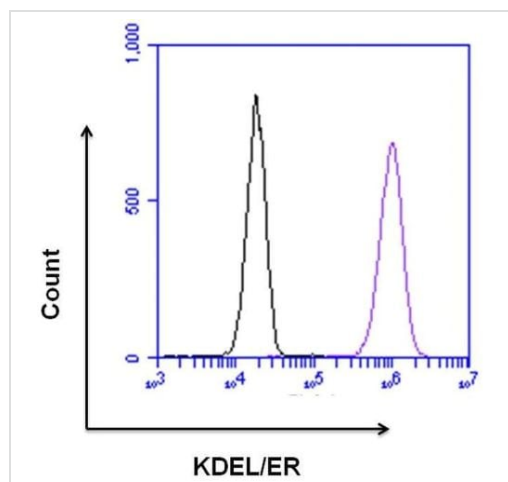
Relevance

The sequence Lys-Asp-Glu-Leu (KDEL) or a closely related sequence, is present at the carboxy-terminus of soluble endoplasmic reticulum (ER) resident proteins and some membrane proteins. 78 and 94 kDa glucose regulated proteins (GRP 78) and GRP 94 respectively and protein disulfide isomerase (PDI) all share the C-terminal KDEL sequence. The presence of carboxy-terminal KDEL appears to be necessary for ER retention and appears to be sufficient to reduce the secretion of proteins from the ER. This retention is reported to be mediated by a KDEL receptor.

Cellular localization

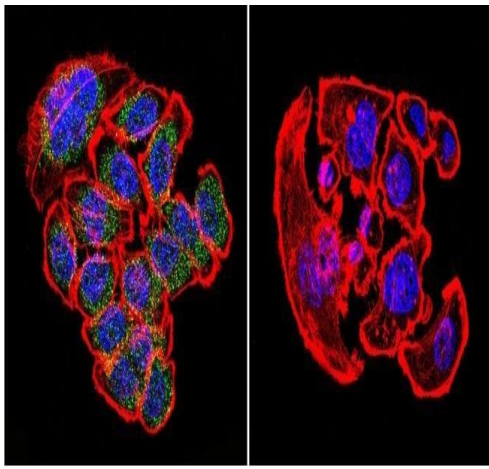
Endoplasmic reticulum

Images



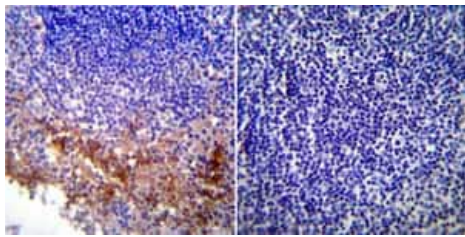
Flow Cytometry - Anti-KDEL antibody (ab2898)

Flow cytometry analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling KDEL with ab2898 (purple) or a rabbit IgG isotype control (black) at a 10 µg/mL. After incubation for 1 hour on ice, the cells were labeled with a Goat anti-Rabbit IgG (H+L) secondary antibody, Alexa Fluor® 647 conjugate at 1/50 dilution for 1 hour on ice. A representative 10,000 cells were acquired and analyzed for each sample.



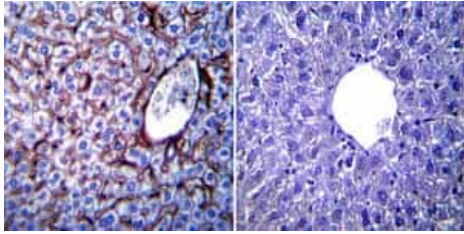
Immunocytochemistry/ Immunofluorescence - Anti-KDEL antibody (ab2898)

Immunofluorescent analysis of U-251 MG (Human brain glioma cell line) cells labeling KDEL (green) with ab2898. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with ab2898 at 1/200 dilution overnight at 4 C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.



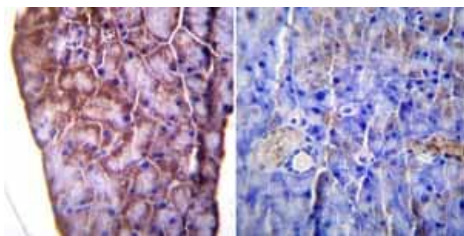
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KDEL antibody (ab2898)

Immunohistochemistry was performed on normal biopsies of deparaffinized Mouse lymph node tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:200 with a rabbit polyclonal antibody recognizing KDEL ab2898 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KDEL antibody (ab2898)

Immunohistochemistry was performed on normal biopsies of deparaffinized Mouse liver tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:100 with a rabbit polyclonal antibody recognizing KDEL ab2898 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KDEL antibody (ab2898)

Immunohistochemistry was performed on normal biopsies of deparaffinized Mouse pancreas tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:100 with a rabbit polyclonal antibody recognizing KDEL ab2898 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

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