


# Alexa Fluor® 488 Anti-KDEL antibody [EPR12668] - ER Marker ab184819

Recombinant RabMAb

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

### Overview

<b>Product name</b>	Alexa Fluor® 488 Anti-KDEL antibody [EPR12668] - ER Marker
<b>Description</b>	Alexa Fluor® 488 Rabbit monoclonal [EPR12668] to KDEL - ER Marker
<b>Host species</b>	Rabbit
<b>Conjugation</b>	Alexa Fluor® 488. Ex: 495nm, Em: 519nm
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide corresponding to KDEL .
<b>Positive control</b>	ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a>.</p> <p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or</p>

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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. Stable for 12 months at -20°C. Store In the Dark.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR12668
<b>Isotype</b>	IgG

## Applications

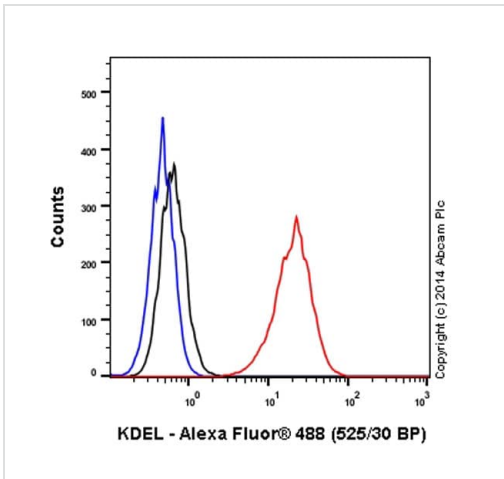
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab184819 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (1)	1/50 - 1/100.
Flow Cyt (Intra)		1/500. <b>ab199091</b> - Rabbit monoclonal IgG (Alexa Fluor® 488), is suitable for use as an isotype control with this antibody.

## Target

<b>Relevance</b>	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.
<b>Cellular localization</b>	Endoplasmic reticulum

## Images

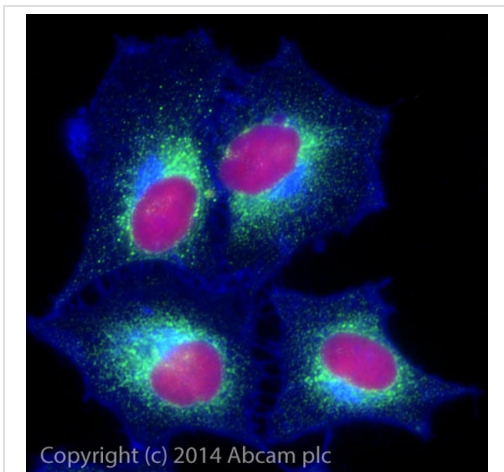


Flow Cytometry (Intracellular) - Alexa Fluor® 488  
 Anti-KDEL antibody [EPR12668] - ER Marker  
 (ab184819)

Overlay histogram showing HeLa cells stained with ab184819 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab184819, 1/500 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Alexa Fluor® 488 used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

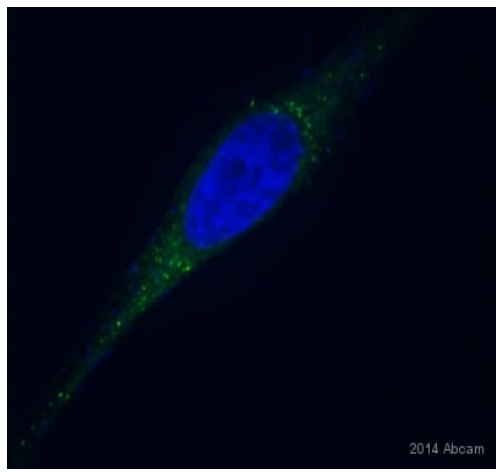
Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

This antibody gave a positive signal in HeLa fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-KDEL antibody [EPR12668] - ER Marker (ab184819)

ab184819 staining KDEL in HeLa cells. The cells were fixed with 100% methanol (5min) and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab184819 at a working dilution of 1 in 50 overnight at +4°C (shown in green). AlexaFluor® 350 WGA was used at a 1/200 dilution and incubated for 1h with the cells, to label plasma membranes (shown in blue). Nuclear DNA was labelled in red with 1.25 µM DRAQ5™ (**ab108410**).



ab184819 staining KDEL in HeLa cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with formaldehyde, permeabilized with 0.1% Triton X-100 in 1X PBS and blocked with 2% BSA for 30 minutes at 25°C. Samples were incubated with primary antibody (1/100 in 1X PBS + 0.1% Triton X-100) for 1 hour at 25°C.

Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-KDEL antibody [EPR12668] - ER Marker (ab184819)

This image is courtesy of an Abreview submitted by Shijian Zhang

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Alexa Fluor® 488 Anti-KDEL antibody [EPR12668] - ER Marker (ab184819)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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