abcam

Product datasheet

Alexa Fluor® 488 Anti-Calreticulin antibody [EPR3924] - ER Marker ab196158





重组 RabMAb

★★★★★ 2 Abreviews 17 References 5 图像

概述

产品名称 Alexa Fluor® 488荧光Anti-Calreticulin抗体[EPR3924] - ER Marker

描述 Alexa Fluor® 488荧光兔单克隆抗体[EPR3924] to Calreticulin - ER Marker

宿主 Rabbit

偶联物 Alexa Fluor® 488. Ex: 495nm, Em: 519nm

经测试应用 适用于: ICC/IF, Flow Cyt (Intra)

种属反应性 与反应: Human

预测可用于: Mouse, Rat, Monkey ______

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

(Peptide available as ab180826)

阳性对照 ICC/IF: HeLa cells, HAP1 cells (HAP1-CALR knockout cells used as negative cell line) Flow Cyt

(intra): HeLa cells, HAP1-WT cells.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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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 **outlicensing@thermofisher.com**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 EPR3924

应用

同种型

The Abpromise guarantee Abpromise™承诺保证使用ab196158于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

ΙgG

应用	Ab评论	说明
ICC/IF		1/1000. This product gave a positive signal in HeLa cells fixed with 100% methanol (5 min)
Flow Cyt (Intra)		1/50. ab199091 - Rabbit monoclonal lgG (Alexa Fluor® 488), is suitable for use as an isotype control with this antibody.

靶标

功能 Molecular calcium-binding chaperone promoting folding, oligomeric assembly and quality control

in the ER via the calreticulin/calnexin cycle. This lectin interacts transiently with almost all of the monoglucosylated glycoproteins that are synthesized in the ER. Interacts with the DNA-binding

domain of NR3C1 and mediates its nuclear export.

序列相似性 Belongs to the calreticulin family.

结构域 Can be divided into a N-terminal globular domain, a proline-rich P-domain forming an elongated

arm-like structure and a C-terminal acidic domain. The P-domain binds one molecule of calcium with high affinity, whereas the acidic C-domain binds multiple calcium ions with low affinity.

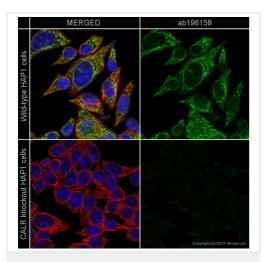
The interaction with glycans occurs through a binding site in the globular lectin domain.

The zinc binding sites are localized to the N-domain.

Associates with PDIA3 through the tip of the extended arm formed by the P-domain.

Endoplasmic reticulum lumen. Cytoplasm > cytosol. Secreted > extracellular space > extracellular matrix. Cell surface. Also found in cell surface (T cells), cytosol and extracellular matrix. Associated with the lytic granules in the cytolytic T-lymphocytes.

图片

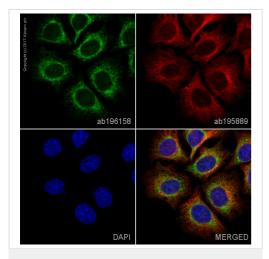


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Calreticulin antibody [EPR3924] -ER Marker (ab196158)

ab196158 staining Calreticulin (shown in green) in wild-type HAP1 cells (top panel) and CALR knockout HAP1 cells (bottom panel).

The cells were fixed with 100% methanol (5 minutes), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1 hour. The cells were then incubated with ab196158 at 1/500 dilution (shown in green) and **ab195889** at 1/250 dilution (shown in pseudo colour red) overnight at +4°C. Nuclear DNA was labeled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

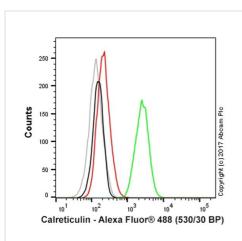


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Calreticulin antibody [EPR3924] - ER Marker (ab196158)

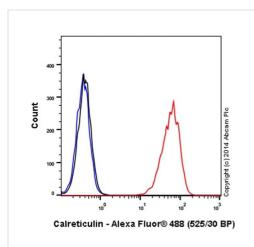
ab196158 staining Calreticulin in HeLa (Human epithelial cell line from cervix adenocarcinoma) cells.

The cells were fixed with 100% methanol (5 minutes), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1 hour. The cells were then incubated overnight at +4°C with ab196158 at 1/1000 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labeled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Calreticulin antibody [EPR3924] - ER Marker (ab196158)



Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Calreticulin antibody [EPR3924] - ER Marker (ab196158)

Overlay histogram showing HAP1 wildtype (green line) and HAP1-CALR knockout cells (red line) stained with ab196158.

The cells were fixed with 80% methanol (5 minutes) and then permeabilized with 0.1% PBS-Triton X-100 for 15 minutes. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab196158, 0.1 μ g/ml dilution) for 30 minutes at 22°C.

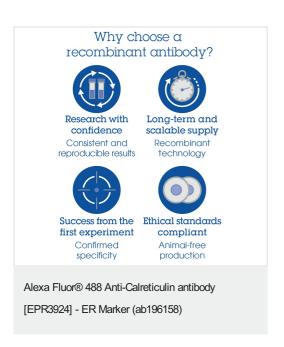
A rabbit IgG isotype control antibody (<u>ab199091</u>) was used at the same concentration and conditions as the primary antibody (HAP1 wildtype - black line, HAP1-CALR knockout - grey line). Unlabeled sample was also used as a control (this line is not shown for the purpose of simplicity).

Acquisition of >5,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter.

Overlay histogram showing HeLa cells (Human epithelial cell line from cervix adenocarcinoma) stained with ab196158 (red line).

The cells were fixed with 80% methanol (5 minutes) and then permeabilized with 0.1% PBS-Tween for 20 minutes. 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 (ab196158, 1/50 dilution) for 30 minutes 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. Unlabeled 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.



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