abcam

Product datasheet

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



ועלשעבע RabMAb

*** 2 Abreviews 17 References

製品の概要

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

製品の詳細 Alexa Fluor® 488 Rabbit monoclonal [EPR3924] to Calreticulin - ER Marker

由来種 Rabbit

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

アプリケーション 適用あり: ICC/IF, Flow Cyt (Intra)

交差種: Human

交差が予測される動物種: Mouse, Rat, Monkey 4

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

(Peptide available as ab180826)

ポジティブ・コントロール ICC/IF: HeLa cells, HAP1 cells (HAP1-CALR knockout cells used as negative cell line) Flow Cyt

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

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**.

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.

種交差性

免疫原

特記事項

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.

製品の特性

製品の状態 Liquid

保存方法 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.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

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

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EPR3924

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab196158の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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.

ターゲット情報

機能 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.

配列類似性 Belongs to the calreticulin family.

ドメイン 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.

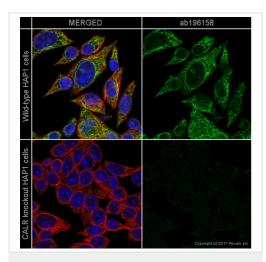
The interaction with glycans occurs through a binding site in the globular lectin domain.

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.

画像

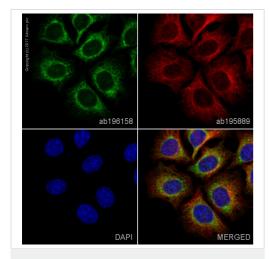


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Calreticulin antibody [EPR3924] -ER Marker (ab196158)

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).

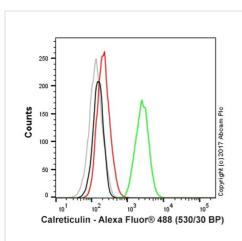


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Calreticulin antibody [EPR3924] - ER Marker (ab196158)

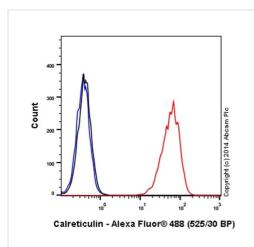
ab196158 staining Calreticulin in HeLa (Human epithelial cell line from cervix adenocarcinoma) cells.

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.

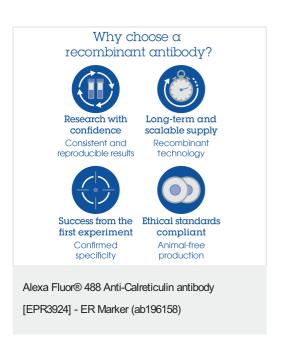
A rabbit IgG isotype control antibody (<u>ab199091</u>) was used at the same concentration and conditions as the primary antibody (HAP1 wildtype - black line, HAP1-CALR knockout - grey line). Unlabeled sample was also used as a control (this line is not shown for the purpose of simplicity).

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.



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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors