abcam

Product datasheet

Alexa Fluor® 647 Anti-Calreticulin antibody [EPR3924] - ER Marker ab196159



ועלשעבע RabMAb

**** 2 Abreviews 22 References

製品の概要

Alexa Fluor® 647 Anti-Calreticulin antibody [EPR3924] - ER Marker 製品名

製品の詳細 Alexa Fluor® 647 Rabbit monoclonal [EPR3924] to Calreticulin - ER Marker

由来種 Rabbit

標識 Alexa Fluor® 647. Ex: 652nm, Em: 668nm

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

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 🔷

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. (Peptide available as ab180826)

ICC/IF: HeLa and HAP1 cells (HAP1-CALR knockout cells used as a negative cell line). Flow Cyt

(intra): HeLa and 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**.

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免疫原

ポジティブ・コントロール

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 lgG

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ab196159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	*** <u>*</u>	1/50 - 1/500.
Flow Cyt (Intra)		1/50.

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.

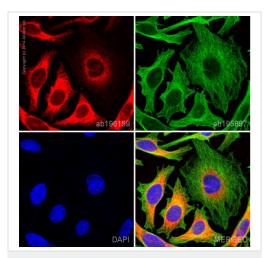
The zinc binding sites are localized to the N-domain.

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

細胞内局在 Endoplasmic reticulum lumen. Cytoplasm > cytosol. Secreted > extracellular space > extracellular

matrix. Cell surface. Also found in cell surface (T cells), cytosol and extracellular matrix.

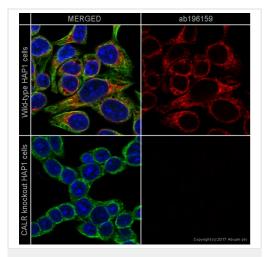
Associated with the lytic granules in the cytolytic T-lymphocytes.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-Calreticulin antibody [EPR3924] -ER Marker (ab196159)

ab196159 staining Calreticulin in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabiliszd in 0.1% Triton X-100 for 5 minutes 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 ab196159 at 1/100 dilution (shown in red) and **ab195887**, Mouse monoclonal [DM1A] to alpha Tubulin (Alexa Fluor[®] 488, shown in green) at $2\mu g/ml$ overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

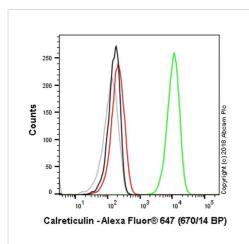
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



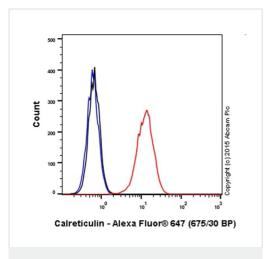
Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-Calreticulin antibody [EPR3924] -ER Marker (ab196159)

ab196159 staining Calreticulin in wild-type HAP1 cells (top panel) and CALR knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), 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 1h. The cells were then incubated with ab196159 at 1/500 dilution (shown in red) and ab195887 at 1/250 dilution (shown in green) overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

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



Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-Calreticulin antibody [EPR3924] - ER Marker (ab196159)



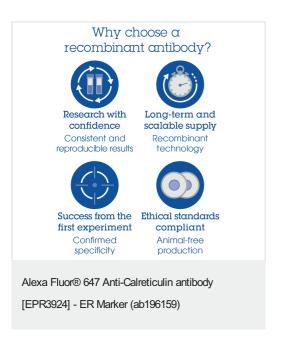
Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-Calreticulin antibody [EPR3924] - ER Marker (ab196159)

Overlay histogram showing HAP1 wildtype (green line) and HAP1-CALR knockout cells (red line) stained with ab196159. The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in $1x\,PBS$ / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab196159, $0.1\mu g/ml$ dilution) for 30 min at $22^{\circ}C$.

A rabbit monoclonal IgG isotype control antibody (<u>ab199093</u>) was used at the same concentration and conditions as the primary antibody (HAP1 wildtype - black line, HAP1-CALR knockout - grey line). Unlabelled 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 40 mW Red laser (640nm) and 670/14 bandpass filter.

Overlay histogram showing HeLa cells stained with ab196159 (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 (ab196159, 1/50 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit monoclonal IgG [EPR25A] Alexa Fluor® 647 (ab199093) 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 solid-state 25mW red diode laser (635 nm) and 675/30 bandpass filter.



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