abcam

Product datasheet

Anti-Calreticulin antibody - ER Marker ab2907

16 Abreviews 229 References 10 图像

概述

产品名称	Anti-Calreticulin抗体- ER Marker
描述	兔多克隆抗体to Calreticulin - ER Marker
宿主	Rabbit
经测试应用	**适用于:** ICC/IF, WB
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Recombinant full length protein corresponding to Human Calreticulin.
阳性对照	WB: HL-60, LNCaP, HeLa and MCF-7 cell lysates; Mouse and rat liver tissue lysates; Mouse skeletal muscle whole cell lysate. ICC/IF: A431, HeLa, U2OS, HepG2 and HMVEC cells.
常规说明	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. 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

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 or -80°C. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.05% Sodium azide
纯度	Whole antiserum
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab2907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。

应用	Ab评论	说明
ICC/IF	★★★★★ (8)	Use at an assay dependent concentration.
WB	★★★★☆ (4)	1/1000.

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.

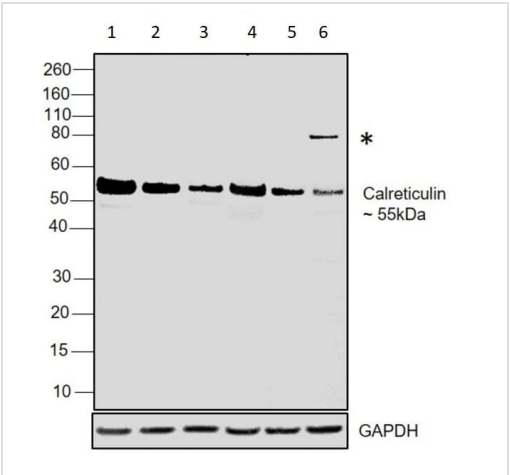
结构域

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.

细胞定位

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



Western blot - Anti-Calreticulin antibody - ER Marker (ab2907)

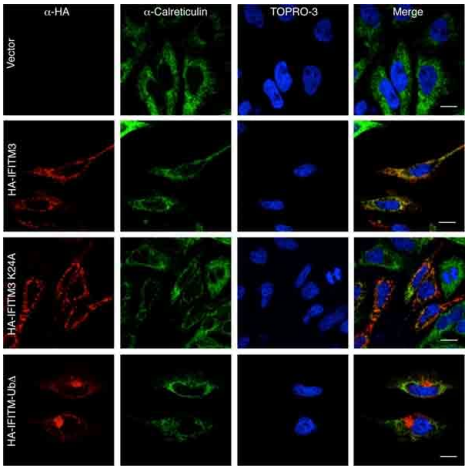
All lanes : Anti-Calreticulin antibody - ER Marker (ab2907) at 1/1000 dilution

Lane 1 : HL-60 cell lysate
Lane 2 : LNCaP cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : MCF-7 cell lysate
Lane 5 : Mouse liver tissue lysate
Lane 6 : Rat liver tissue lysate

Lysates/proteins at 30 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP at 1/4000 dilution

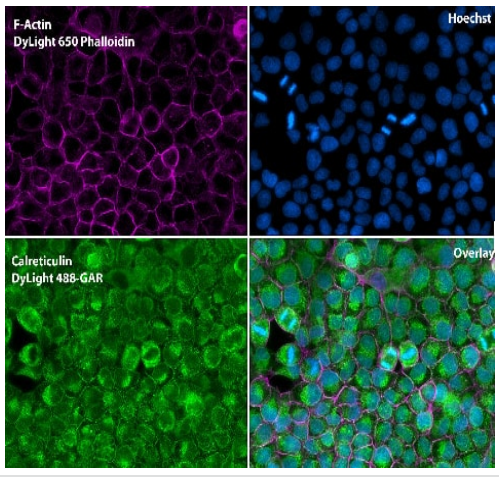
Observed band size: 55 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Calreticulin antibody - ER Marker (ab2907)

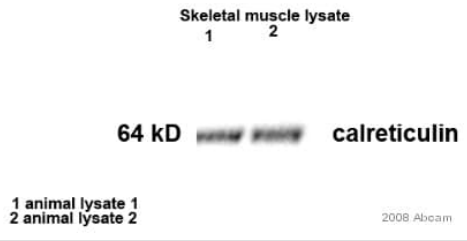
Image from Yount JS et al, J Biol Chem. 2012 Jun 1;287(23):19631-41. Epub 2012 Apr 17, Fig 3. DOI 10.1074/jbc.M112.362095 June 1, 2012 The Journal of Biological Chemistry, 287, 19631-19641.

ab2907 used at a 1/1000 dilution staining Calreticulin in HeLa cells by Immunocytochemistry/ Immunofluorescence.
HeLa cells were transfected overnight with empty vector or plasmids encoding the indicated IFITM3 constructs. Immunofluorescence with a-HA antibodies allowed IFITM3 visualization, and a-calreticulin staining allowed visualization of the ER. TOPRO-3 was used to visualize nuclei. Scale bars indicate 10 µm. Ub? indicates mutation of Lys-24, Lys-83, Lys-88, and Lys-104 to alanine.



Immunocytochemistry/ Immunofluorescence - Anti-Calreticulin antibody - ER Marker (ab2907)

Immunocytochemistry/Immunofluorescence analysis of Calreticulin (green) in A431 cells. Formalin fixed cells were permeabilized with 0.1% Triton X-100 in PBS for 10 minutes at room temperature and blocked with 2% BSA in PBS + 0.1% Triton X-100 for 30 minutes at room temperature. Cells were incubated with ab2907 (1:75) for at least 1 hour at room temperature, washed with PBS, and incubated with DyLight 488 goat anti-rabbit IgG secondary antibody (1:250) for 30 minutes at room temperature. Actin was stained with DyLight 650 Phalloidin (1:120) and nuclei (blue) were stained with Hoechst (1ug/ml) for 30 minutes. Images were taken at 20X magnification.



Western blot - Anti-Calreticulin antibody - ER Marker (ab2907)

This image is courtesy of an anonymous Abreview

All lanes : Anti-Calreticulin antibody - ER Marker (ab2907) at 1/1000 dilution

All lanes : Whole cell lysate prepared from mouse skeletal muscle

Lysates/proteins at 30 µg per lane.

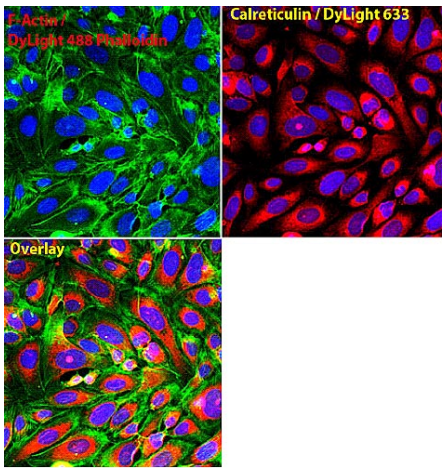
Secondary

All lanes : HRP-conjugated mouse polyclonal to rabbit Ig at 1/10000 dilution

Developed using the ECL technique.

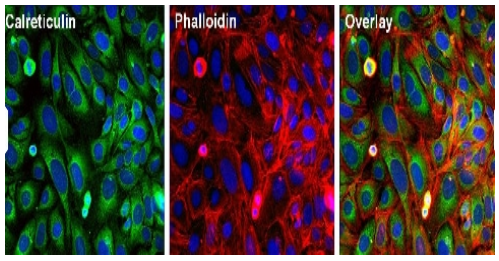
Performed under reducing conditions.

Exposure time: 3 seconds



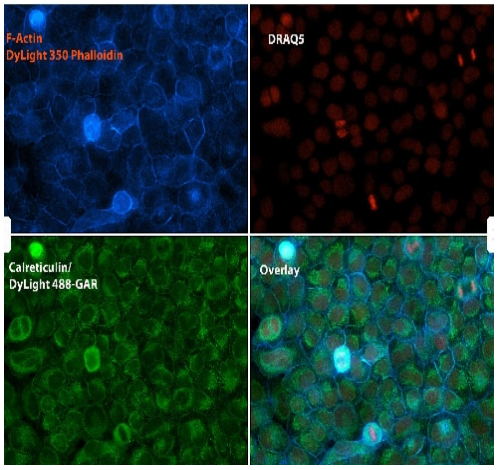
Immunocytochemistry/ Immunofluorescence - Anti-Calreticulin antibody - ER Marker (ab2907)

Immunocytochemistry/Immunofluorescence analysis of Calreticulin (red) in U2OS cells. Formalin fixed cells were permeabilized with 0.1% Triton X-100 in PBS for 10 minutes at room temperature and blocked with 2% BSA in PBS + 0.1% Triton X-100 for 30 minutes at room temperature. Cells were incubated with ab2907 (1:75) for at least 1 hour at room temperature, washed with PBS, and incubated with DyLight 633 goat anti-rabbit IgG secondary antibody (1:250) for 30 minutes at room temperature. Actin was stained with DyLight 488 Phalloidin (1:300) and nuclei (blue) were stained with Hoechst (1ug/ml) for 30 minutes. Images were taken at 20X magnification.



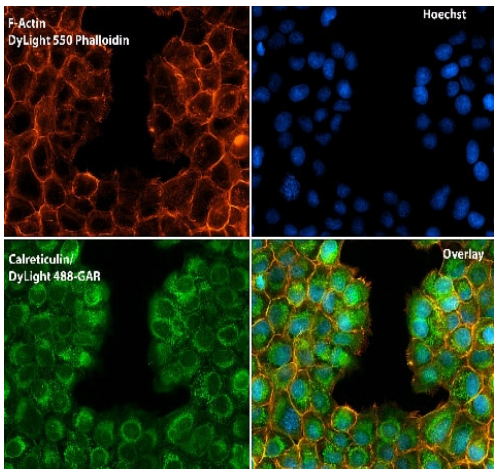
Immunocytochemistry/ Immunofluorescence - Anti-Calreticulin antibody - ER Marker (ab2907)

Immunocytochemsitry/Immunofluorescence analysis of Calreticulin (green) U2OS cells. Formalin fixed cells were permeabilized with 0.1% Triton X-100 in PBS for 10 minutes at room temperature and blocked with 2% BSA in PBS 0.1% triton-X for 30 minutes at room temperature. Cells were incubated with ab2907 (1:50) for at least 1 hour at room temperature. Cells were washed with PBS and incubated with DyLight 488 goat-anti-rabbit IgG secondary antibody (1:250) for 30 minutes at room temperature. Actin filaments (red) were stained with DyLight 554-Phalloidin (1:300) in PBS and incubated for 30 minutes. Nuclei (blue) were stained with Hoechst 33342 dye (1µg/mL). Images were taken at 20X magnification.



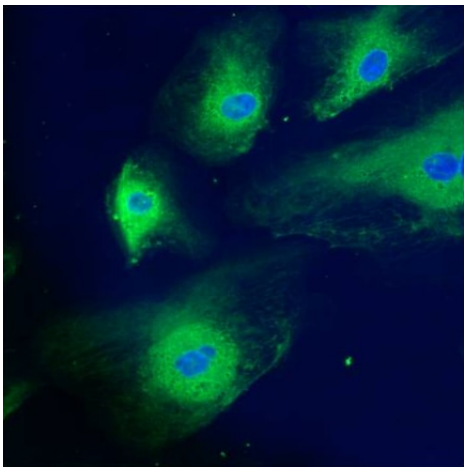
Immunocytochemistry/ Immunofluorescence - Anti-Calreticulin antibody - ER Marker (ab2907)

Immunocytochemistry/Immunofluorescence analysis of Calreticulin (green) in A431 cells. Formalin fixed cells were permeabilized with 0.1% Triton X-100 in PBS for 10 minutes at room temperature and blocked with 2% BSA in PBS + 0.1% Triton X-100 for 30 minutes at room temperature. Cells were incubated with ab2907 (1:75) for at least 1 hour at room temperature, washed with PBS, and incubated with Dylight 488 goat anti-rabbit IgG secondary antibody (1:250) for 30 minutes at room temperature. Actin was stained with Dylight 350 Phalloidin (1:120) and nuclei (red) were stained with DRAQ5 (1ug/ml) for 30 minutes. Images were taken at 20X magnification.



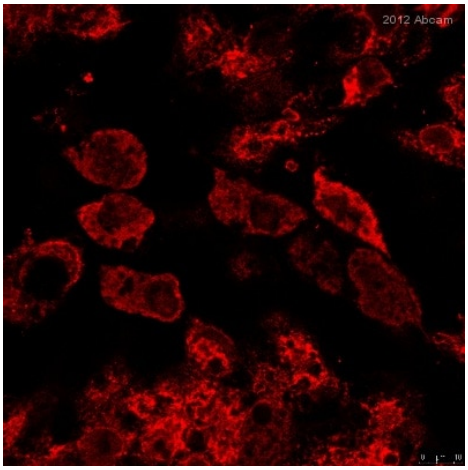
Immunocytochemistry/ Immunofluorescence - Anti-Calreticulin antibody - ER Marker (ab2907)

Immunocytochemistry/Immunofluorescence analysis of Calreticulin (green) in A431 cells. Formalin fixed cells were permeabilized with 0.1% Triton X-100 in PBS for 10 minutes at room temperature and blocked with 2% BSA in PBS + 0.1% Triton X-100 for 30 minutes at room temperature. Cells were incubated with ab2907 (1:75) for at least 1 hour at room temperature, washed with PBS, and incubated with DyLight 488 goat anti-rabbit IgG secondary antibody (1:250) for 30 minutes at room temperature. Actin was stained with DyLight 550 Phalloidin (1:120) and nuclei (blue) were stained with Hoechst (1ug/ml) for 30 minutes. Images were taken at 20X magnification.



Immunocytochemistry/ Immunofluorescence - Anti-Calreticulin antibody - ER Marker (ab2907)

Immunocytochemistry/Immunofluorescence analysis of HMVEC cells labelling Calreticulin using ab2907.



Immunocytochemistry/ Immunofluorescence - Anti-Calreticulin antibody - ER Marker (ab2907)

This image is courtesy of an anonymous Abreview

Immunofluorescence analysis of HepG2 cells, staining Calreticulin with ab2907.

Cells were fixed with paraformaldehyde, permeabilized with 0.1% Saponin and blocked with 10% serum for 1 hour at 20°C. Samples were incubated with primary antibody (1/200 in PBS + 0.1% saponin) for 1 hour at 20°C. An AlexaFluor®647-conjugated donkey anti-rabbit polyclonal IgG (1/400) was used as the secondary antibody.

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