

## **Product Datasheet**

## Anti-Calreticulin/CALR Antibody (orb1819374)

**Description** Anti-Calreticulin/CALR Antibody. Tested in ELISA, IHC, WB, Flow Cytometry

applications. This antibody reacts with Human, Mouse, Rat.

**Species/Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Conjugation** Unconjugated

**Tested Applications** ELISA, FC, IHC, WB

Immunogen E.coli-derived human Calreticulin/CALR recombinant protein (Position: T333-

Q365). Human CALR shares 100% amino acid (aa) sequence identity with both

mouse and rat CALR.

Form/Appearance Lyophilized

**Concentration** Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -

20°C in small aliquots to prevent freeze-thaw cycles.

**Note** For research use only

**Application notes** Western blot, 0.1-0.25 μg/ml, Human, Mouse, Rat Immunohistochemistry, 2-5

μg/ml, Human, Mouse, Rat Flow Cytometry (Fixed), 1-3 μg/1x106 cells, Human,

Rat ELISA,  $0.1-0.5 \mu g/ml$ , -. Adding 0.2 ml of distilled water will yield a

concentration of 500 µg/ml

**Isotype** IgG

**Clonality** Polyclonal

MW 50 kDa

Uniprot ID P27797

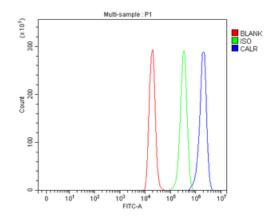
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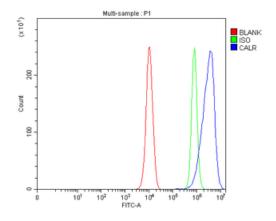


## **Expiration Date**

12 months from date of receipt.



Flow Cytometry analysis of C6 cells using anti-Calreticulin/CALR antibody. Overlay histogram showing C6 cells (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Calreticulin/CALR Antibody (1  $\mu$ g/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (5-10  $\mu$ g/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1  $\mu$ g/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

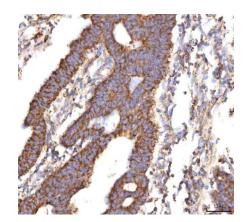


Flow Cytometry analysis of PC-3 cells using anti-Calreticulin/CALR antibody. Overlay histogram showing PC-3 cells (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Calreticulin/CALR Antibody (1  $\mu$ g/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit lgG (5-10  $\mu$ g/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit lgG (1  $\mu$ g/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

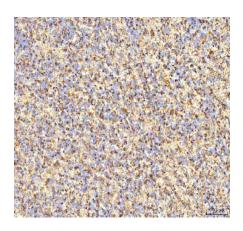
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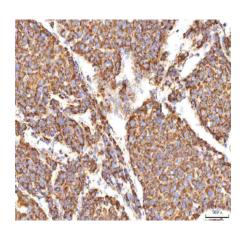




IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of human colon adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



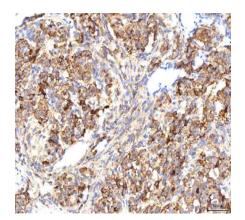
IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of human glioblastoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



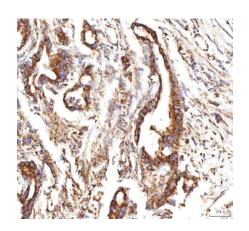
IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



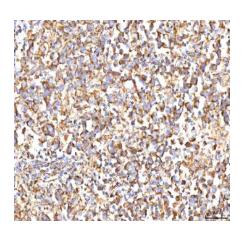




IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



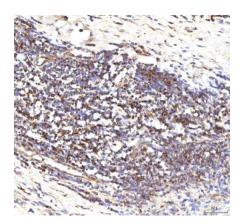
IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of human pancreas ductal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



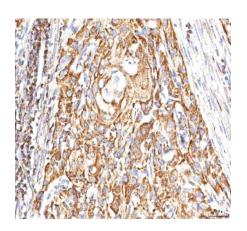
IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of human testicular seminoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.







IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



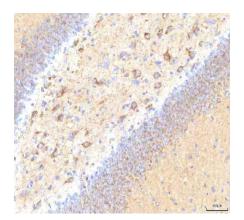
IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of human urothelial carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



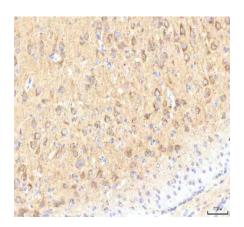
IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.







IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



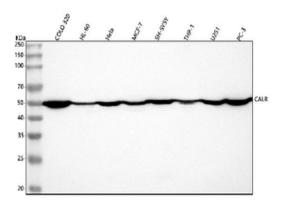
IHC analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Calreticulin/CALR was detected in a paraffinembedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-Calreticulin/CALR Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



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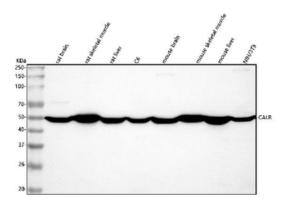


Western blot analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human COLO 320 whole cell lysates, Lane 2: human HL-60 whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: human MCF-7 whole cell lysates, Lane 5: human SH-SY5Y whole cell lysates, Lane 6: human THP-1 whole cell lysates, Lane 7: human U251 whole cell lysates, Lane 8: human PC-3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Calreticulin/CALR antigen affinity purified polyclonal antibody at 0.25 µg/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Calreticulin/CALR at approximately 50 kDa. The expected band size for Calreticulin/CALR is at 48, 55-65 kDa.

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Western blot analysis of Calreticulin/CALR using anti-Calreticulin/CALR antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat skeletal muscle tissue lysates, Lane 3: rat liver tissue lysates, Lane 4: rat C6 whole cell lysates, Lane 5: mouse brain tissue lysates, Lane 6: mouse skeletal muscle tissue lysates, Lane 7: mouse liver tissue lysates, Lane 8: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Calreticulin/CALR antigen affinity purified polyclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Calreticulin/CALR at approximately 50 kDa. The expected band size for Calreticulin/CALR is at 48, 55-65 kDa.

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