

Datasheet for ABIN6656052  
**anti-Calreticulin antibody**



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2 Images

## Overview

Quantity:	200 µL
Target:	Calreticulin (CALR)
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Calreticulin antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF), Fluorescence Microscopy (FM)

## Product Details

Purpose:	Calreticulin Antibody
Immunogen:	Calreticulin Antibody was produced from whole rabbit serum prepared by repeated immunizations with a synthetic peptide of human calreticulin.
Isotype:	IgG
Cross-Reactivity (Details):	A BLAST analysis was used to suggest cross-reactivity with Calreticulin from Human, mouse, rat, bovine, canine, chicken, guinea pig, monkey, pig, hamster, rabbit, and sheep based on 100 % homology with the immunizing sequence.
Purification:	Anti-Calreticulin Antibody was prepared from monospecific antiserum by delipidation and defibrination.
Sterility:	Sterile filtered

## Target Details

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Target: Calreticulin (CALR)

Alternative Name: Calreticulin ([CALR Products](#))

Background: Synonyms: CALR, Calregulin, cC1qR, CRP55, ERp60, HSCBP, RO, SSA, grp60, Calreticulin, Endoplasmic reticulum resident protein 60, CRTC

Background: Calreticulin is a multifunctional, highly conserved Ca<sup>2+</sup>-binding protein that is localized to the endoplasmic reticulum (ER), but has also been detected in the nucleus and nuclear envelop. Like many other ER proteins, it has the conserved ER retention KDEL (Lys-Asp-Glu-Leu) sequence at its C-terminus. CRT's three domains include a 180 residue N-terminal domain, a proline-rich P-domain (residues 189-288) that binds Ca<sup>2+</sup> with high affinity and shares homology with calnexin (CNX) and calmeglin, and a 110 residue C-terminal domain that binds Ca<sup>2+</sup> with low affinity but high capacity. Recent studies suggest that this soluble ER protein has a multifunctional role. It appears to be involved in calcium storage and regulation as well as having a molecular chaperone activity. It has been shown to interact with the cytoskeleton and to be involved in the regulation of gene expression. Calreticulin may also play a role in cellular proliferation including its apparent activity in the proliferation of certain viruses within mammalian host cells, and it has also been shown to be induced in response to various types of cell stress including amino acid deprivation. Close interconnections among protein synthesis, gene expression and calcium signaling have been observed by many researchers in recent years. Calreticulin might be centrally located and therefore it crucially participates in the coordination of many functions by the cell. Studies also suggest its involvement in a few diseases such as systemic lupus erythematosus, rheumatoid arthritis, celiac disease, complete congenital heart block, and halothane hepatitis.

Gene Name: CALR

Gene ID: 811

NCBI Accession: [NP\\_004334](#)

UniProt: [P27797](#)

Pathways: [Retinoic Acid Receptor Signaling Pathway](#), [Intracellular Steroid Hormone Receptor Signaling Pathway](#), [Regulation of Intracellular Steroid Hormone Receptor Signaling](#), [Nuclear Hormone Receptor Binding](#), [ER-Nucleus Signaling](#), [Unfolded Protein Response](#)

## Application Details

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Application Notes: Immunoprecipitation\_Dilution: User Optimized  
Immunohistochemistry\_Dilution: User Optimized

## Application Details

IF\_Microscopy\_Dilution: 1:200

Western\_Blots\_Dilution: 1:5000-10000

**Comment:** Anti-Calreticulin Antibody has been tested by western blot and immunofluorescence and is suitable for use in IHC and IP. Expect a band approximately ~63kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.

**Restrictions:** For Research Use only

## Handling

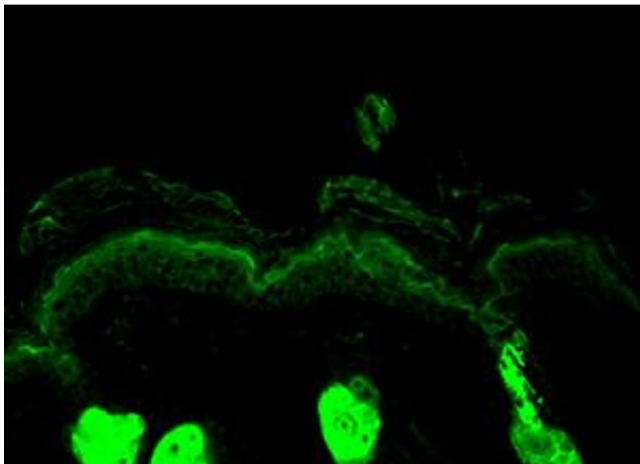
**Format:** Liquid

**Storage:** 4 °C, -20 °C

**Storage Comment:** Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

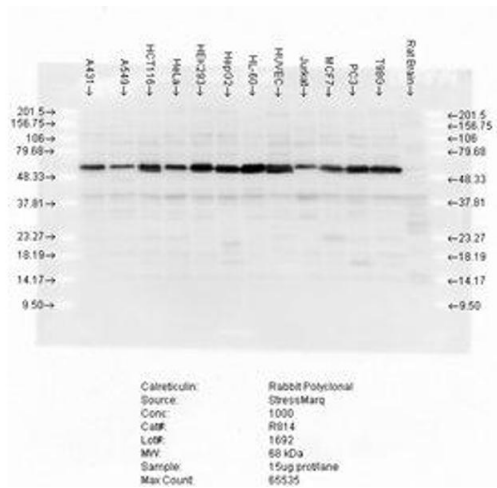
**Expiry Date:** 12 months

## Images



### Immunofluorescence

**Image 1.** Calreticulin Immunofluorescence. Immunofluorescence Microscopy of rabbit Anti-Calreticulin Antibody. Tissue: Backskin section of transgenic mice. Fixation: Paraffin-embedded. Primary antibody: anti-Calreticulin for 1h at RT. Secondary antibody: Peroxidase rabbit secondary at 1:10,000 for 45 min at RT. Localization: Cytoplasm. Staining: Calreticulin as precipitated green signal.



## Western Blotting

**Image 2.** Calreticulin Western Blot. Western Blot of rabbit anti-Calreticulin antibody. Lane 1: A431. Lane 2: A549. Lane 3: HCT116. Lane 4: HeLa. Lane 5: HEK293. Lane 6: HepG2. Lane 7: HL-60. Lane 8: HUVEC. Lane 9: Jurkat. Lane 10: MCF7. Lane 11: PC3. Lane 12: T98G. Lane 13: Rat Brain. Load: 10ug. Primary antibody: Calreticulin at 1:1000 overnight at 4°C. Secondary antibody: Goat anti-rabbit IgG HRP at 1:40,000 for 45 min at RT. Blocked: 5% Biotin overnight at 4°C. Predicated/observed size: 48kDa, 63kDa for Calreticulin.