

# Calreticulin Antibody

✓ 100 µl  
(10 western blots)

**Orders** ■ 877-616-CELL (2355)  
orders@cellsignal.com  
**Support** ■ 877-678-TECH (8324)  
info@cellsignal.com  
**Web** ■ www.cellsignal.com

rev. 05/27/11

This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk	55 kDa	Rabbit**

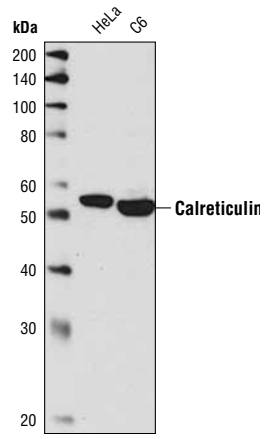
**Background:** Calcium is a universal signaling molecule involved in many cellular functions such as cell motility, metabolism, protein modification, protein folding and apoptosis. Calcium is stored in the endoplasmic reticulum (ER), where it is buffered by calcium binding chaperones such as calnexin and calreticulin, and is released via the IP<sub>3</sub> Receptor (1). Calreticulin also functions as an ER chaperone that ensures proper folding and quality control of newly synthesized glycoproteins. As such, calreticulin presumably does not alter protein folding but ensures proper timing for efficient folding and subunit assembly. Furthermore, calreticulin retains proteins in non-native conformation within the ER and targets them for degradation (2,3).

**Specificity/Sensitivity:** Calreticulin Antibody detects endogenous levels of total calreticulin protein.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide surrounding Gln65 of human calreticulin. Antibodies are purified by peptide affinity chromatography.

**Background References:**

- (1) Groenendyk, J. et al. (2004) *Mol Cells* 17, 383–9.
- (2) Nauseef, W.M. et al. (1995) *J Biol Chem* 270, 4741–7.
- (3) Williams, D.B. (2006) *J Cell Sci* 119, 615–23.



Western blot analysis of extracts from HeLa and C6 cells using Calreticulin Antibody.

Entrez-Gene ID #8312  
Swiss-Prot Acc. #015169

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

\*Species cross-reactivity is determined by western blot.

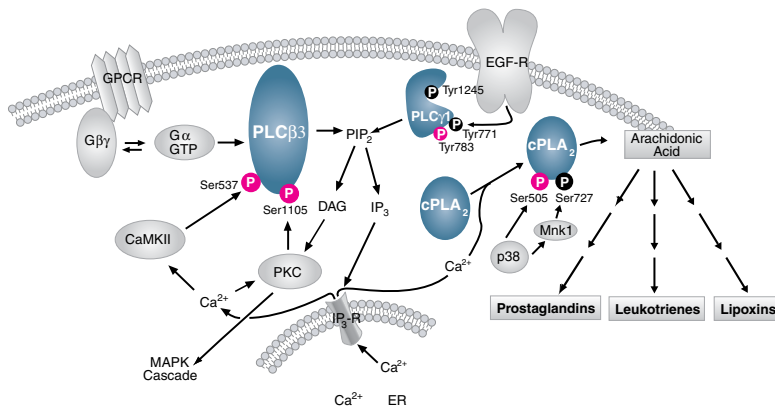
\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

Western Blotting 1:1000

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.



**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.