

## Calreticulin Monoclonal Antibody

### Description

<b>Product type</b>	Antibody
<b>Code</b>	BT-MCA2344
<b>Host</b>	Mouse
<b>Isotype</b>	Mouse IgG2a
<b>Size</b>	100µL, 50µL
<b>Immunogen</b>	Synthetic peptide corresponding to aa (EEEDVPGQAKDELG) of human Calreticulin, conjugated to KLH.
<b>Mol wt</b>	48kDa
<b>Species reactivity</b>	Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Recommended application</b>	WB, IHC, ICC
<b>Concentration</b>	N/A
<b>Full name</b>	N/A
<b>Synonyms</b>	RO; CRT; SSA; cC1qR; FLJ26680; CALR

**This product is for research use only, not for use in human, therapeutic or diagnostic procedure.**

### Background

Calreticulin, also known as RO, CRT, SSA, cC1qR, FLJ26680, CALR. Entrez Protein NP\_004334. It is a multifunctional protein that acts as a major Ca(2+)-binding (storage) protein in the lumen of the endoplasmic reticulum. It is also found in the nucleus, suggesting that it may have a role in transcription regulation. Calreticulin binds to the synthetic peptide KLGFFKR, which is almost identical to an amino acid sequence in the DNA-binding domain of the superfamily of nuclear receptors. Calreticulin binds to antibodies in certain sera of systemic lupus and Sjogren patients which contain anti-Ro/SSA antibodies, it is highly conserved among species, and it is located in the endoplasmic and sarcoplasmic reticulum where it may bind calcium. The amino terminus of calreticulin interacts with the DNA-binding domain of the glucocorticoid receptor and prevents the receptor from binding to its specific glucocorticoid response element. Calreticulin can inhibit the binding of androgen receptor to its hormone-responsive DNA element and can inhibit androgen receptor and retinoic acid receptor transcriptional activities in vivo, as well as retinoic acid-induced neuronal differentiation. Thus, calreticulin can act as an important modulator of the regulation of gene transcription by nuclear hormone receptors. Systemic lupus erythematosus is associated with increased autoantibody titers against calreticulin but calreticulin is not a Ro/SS-A antigen. Earlier papers referred to calreticulin as an Ro/SS-A antigen but this was later disproven. Increased autoantibody titer against human calreticulin is found in infants with complete congenital heart block of both the IgG and IgM classes.

### Recommended Dilution

WB: 1:500 - 1:2000

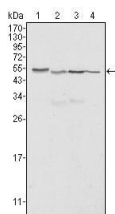
IHC-p: 1:200 - 1:1000

ICC: 1:200 - 1:1000

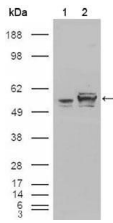
ELISA: 1:10000

Not yet tested in other applications.

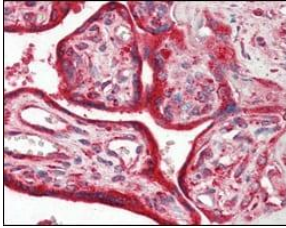
### Images



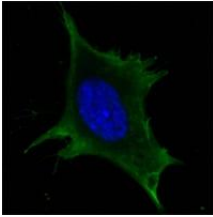
Western blot analysis using Calreticulin mouse mAb against HeLa (1), A549 (2), NTERA2 (3) and MCF-7 (4) cell lysate.



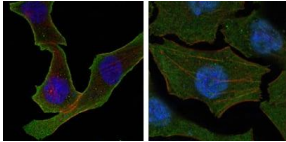
Western blot analysis using Calreticulin mouse mAb against HEK293T cells transfected with the pCMV6-ENTRY control (1) and pCMV6-ENTRY Calreticulin cDNA (2).



Immunohistochemical analysis of paraffin-embedded human placenta tissues using Calreticulin mouse mAb.



Confocal Immunofluorescence analysis of 3T3-L1 cells using Calreticulin mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.



Confocal Immunofluorescence analysis of SKBR-3 (left) and A549 (right) cells using Calreticulin mouse mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

### Storage

Store at 4°C short term. Aliquot and store at -20°C long term.

501 Changsheng S Rd, Nanhu Dist, Jiaxing, Zhejiang, China

Tel: 86 21 31007137 | E-mail: [save@bt-laboratory.com](mailto:save@bt-laboratory.com) | [www.bt-laboratory.com](http://www.bt-laboratory.com)