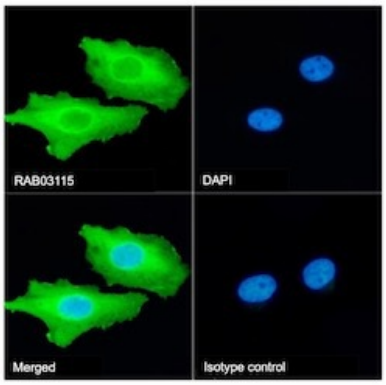
RecomAb™

CALR recombinant monoclonal antibody, clone SAIC-16D-6B9

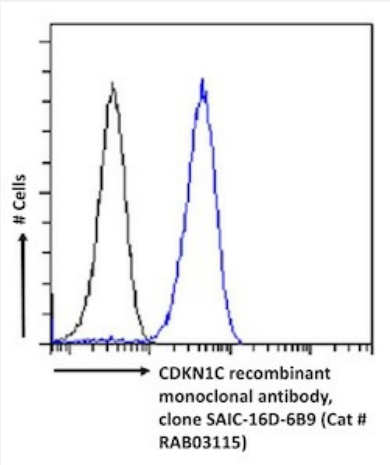
Catalog # RAB03115 Size 200 ug

Applications



Immunofluorescence

Immunofluorescent staining of HeLa cells with CALR recombinant monoclonal antibody, clone SAIC-16D-6B9 (Cat # RAB03115).
Immunofluorescence analysis of paraformaldehyde fixed HeLa cells permewith 0.15% Triton stained with the chimeric r version of RAB03115 (1:100 dilution) for 1h followed by Alexa Fluor® 488 secondary antibody (1:1000 dilution)- showing cytoplasmic staining. The nuclear stain is DAPI (blue). Panels show from left-right- top-bottom RAB03115- DAPI- merged channels and an isotype control. The isotype control was an unknown specificity antibody (3.0) followed by staining with Alexa Fluor® 488 secondary antibody.



Flow Cytometry

Flow cytometric analysis of Hela cells with CALR recombinant monoclonal antibody, clone SAIC-16D-6B9 (Cat # RAB03115).
Paraformaldehyde fixed HeLa cells permewith 0.5% Triton were stained with anti-unknown specificity antibody (3.0; isotype control- black line) or the r version of RAB03115 (blue line) at a dilution of 1:100 for 1h at RT. After washing- the bound antibody was detected using a goat anti-r AlexaFluor® 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human CALR.
Antibody Species	Rabbit

Immunogen	Original antibody is raised against a synthetic peptide "GLQTSQDAR" corresponding to human CALR.
Reactivity	Human
Form	Liquid
Isotype	IgG
Recommend Usage	ELISA Flow Cytometry Immunofluorescence Immuno-MRM (multiple reaction monitoring) Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS with 0.02% Proclin 300
Storage Instruction	Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot
- Immunofluorescence

  Immunofluorescent staining of HeLa cells with CALR recombinant monoclonal antibody, clone SAIC-16D-6B9 (Cat # RAB03115).
  Immunofluorescence analysis of paraformaldehyde fixed HeLa cells permewith 0.15% Triton stained with the chimeric r version of RAB03115 (1:100 dilution) for 1h followed by Alexa Fluor® 488 secondary antibody (1:1000 dilution)- showing cytoplasmic staining. The nuclear stain is DAPI (blue). Panels show from left-right- top-bottom RAB03115- DAPI- merged channels and an isotype control. The isotype control was an unknown specificity antibody (3.0) followed by staining with Alexa Fluor® 488 secondary antibody.
- Enzyme-linked Immunoabsorbent Assay
- Flow Cytometry

  Flow cytometric analysis of Hela cells with CALR recombinant monoclonal antibody, clone SAIC-16D-6B9 (Cat # RAB03115). Paraformaldehyde fixed HeLa cells permewith 0.5% Triton were stained with anti-unknown specificity antibody (3.0; isotype control- black line) or the r version of RAB03115 (blue line) at a dilution of 1:100 for 1h at RT. After washing- the bound antibody was detected using a goat anti-r AlexaFluor® 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.
- Immuno-MRM (multiple reaction monitoring)

Gene Info — CALR

Entrez GeneID	811
Gene Name	CALR
Gene Alias	CRT, FLJ26680, RO, SSA, cC1qR
Gene Description	calreticulin
Omim ID	109091
Gene Ontology	Hyperlink
Gene Summary	Calreticulin 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 r ole in transcription regulation. Calreticulin binds to the synthetic peptide KLGFFKR, which is almo st identical to an amino acid sequence in the DNA-binding domain of the superfamily of nuclear re ceptors. Calreticulin binds to antibodies in certain sera of systemic lupus and Sjogren patients wh ich 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 calret iculin interacts with the DNA-binding domain of the glucocorticoid receptor and prevents the rece ptor from binding to its specific glucocorticoid response element. Calreticulin can inhibit the bindi ng of androgen receptor to its hormone-responsive DNA element and can inhibit androgen recept or and retinoic acid receptor transcriptional activities in vivo, as well as retinoic acid-induced neur onal differentiation. Thus, calreticulin can act as an important modulator of the regulation of gene tr anscription by nuclear hormone receptors. Systemic lupus erythematosus is associated with incre ased autoantibody titers against calreticulin but calreticulin is not a Ro/SS-A antigen. Earlier pape rs referred to calreticulin as an Ro/SS-A antigen but this was later disproven. Increased autoantib ody titer against human calreticulin is found in infants with complete congenital heart block of both the IgG and IgM classes. [provided by RefSeq
Other Designations	Sicca syndrome antigen A (autoantigen Ro; calreticulin)|autoantigen Ro

Pathway

- Antigen processing and presentation

Disease

- Cardiovascular Diseases
- Diabetes Mellitus
- Edema