[KO Validated] CALR Rabbit Polyclonal Antibody

CAB18013

Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

55KDa

Calculated MW:

48kDa

Applications:

WB IHC IF IP

Reactivity:

Human, Mouse, Rat

Antibody Information

Recommended dilutions:
WB 1:500 - 1:2000 IHC 1:50 - 1:200 IF 1:50 - 1:100 IP 1:50 - 1:200

Source:
Rabbit

Isotype:
IgG

Purification:
Affinity purification

Protein Background

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 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.

Immunogen information

Gene ID:
811

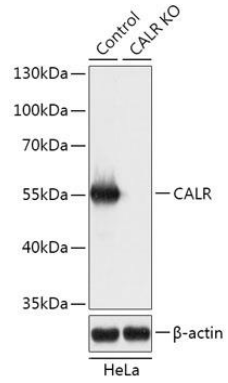
Uniprot
P27797

Synonyms:
CALR; CRT; HEL-S-99n; RO; SSA; cC1qR

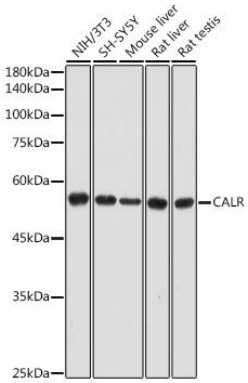
Immunogen:
Recombinant fusion protein containing a sequence corresponding to amino acids 18-417 of human CALR (NP_004334.1).

Storage:
Store at -20℃. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

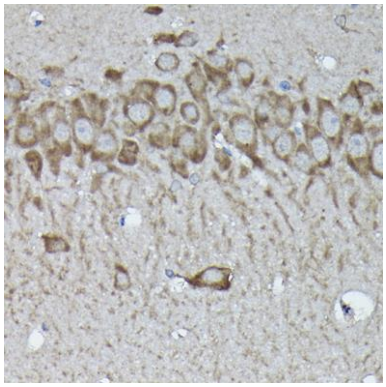
Product Images



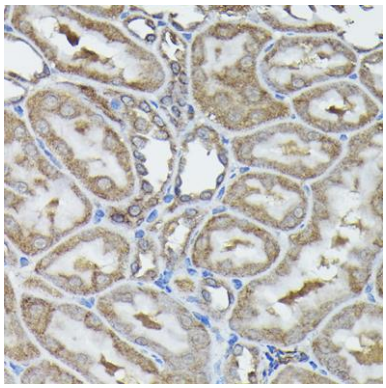
Western blot analysis of extracts from normal (control) and CALR knockout (KO) HeLa cells, using CALR antibody (CAB18013) at 1:3000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 1s.



Western blot analysis of extracts of various cell lines, using CALR antibody (CAB18013) at 1:500 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 30s.



Immunohistochemistry of paraffin-embedded rat brain using [KO Validated] CALR Rabbit pAb (CAB18013) at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded rat kidney using [KO Validated] CALR Rabbit pAb (CAB18013) at dilution of 1:100 (40x lens).

