Recombinant DGRmAb®

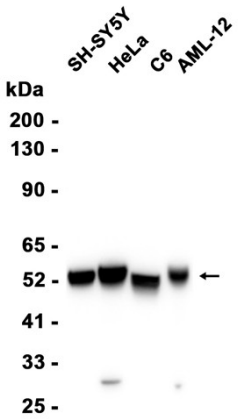
Calreticulin (DGR13791) Rabbit mAb

db15496 **Package : 10μL 20μL 50μL 100μL**

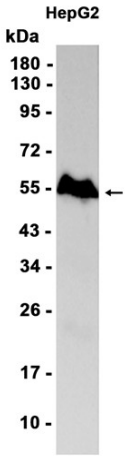
Product Name : Calreticulin (DGR13791) Rabbit mAb
Cat.No.: db15496
Synonyms : RO; CRT; SSA; cC1qR; HEL-S-99n
Application : WB, IHC-P, ICC/IF, FC
Reactivity : Human,Mouse,Rat
Host species : Rabbit

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. [provided by RefSeq, Jul 2008]
Immunogen	A synthetic peptide of human Calreticulin
Gene ID	811
Swiss Prot	P27797
Synonyms	RO; CRT; SSA; cC1qR; HEL-S-99n
Reactivity	Human,Mouse,Rat
Application	WB, IHC-P, ICC/IF, FC
Recommended dilution	WB: 1:1000-1:5000

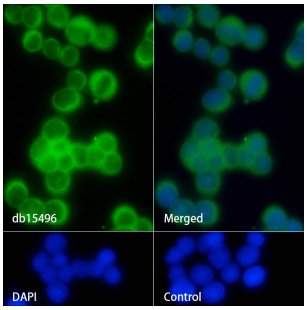
	IHC-P: 1:200-1:500 ICC/IF: 1:200-1:500 FC: 1:10-1:100
Calculated MW	48 kDa
Observed MW	55 kDa
Host species	Rabbit
Clonality	Monoclonal
Clonality No.	DGR13791
Isotype	IgG
Purity	Affinity Purification
Conjugation	Un-conjugated
Storage Stability	Store at -20°C. Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.



Western blot analysis of extracts from SH-SY5Y, HeLa, C6, and AML-12 cells using db15496 at 1:500.



Western blot analysis of extracts from HepG2 cells using db15496 at 1:1000.



Immunofluorescence analysis of HT-29 cells labelling Calreticulin with db15496.

The cells were fixed with cold 100% methanol (10min, 4℃) and blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween 20 for 1h. The cells were then incubate with db15496 (1:200) at room temprature for 1h, followed by a further incubation at room temperature for 45min with Goat Anti Rabbit IgG (H+L)-AF488 (db10005, shown in green). Nuclear DNA was labeled in blue with DAPI.

Control: Secondary antibody only.