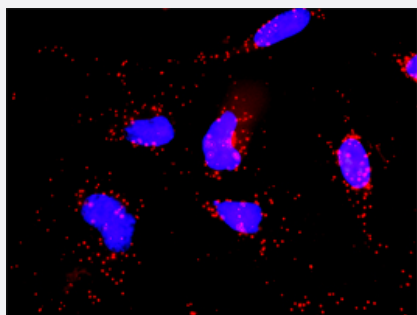


CALR & B2M Protein Protein Interaction Antibody Pair

Catalog # DI0066

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CALR and B2M. HeLa cells were stained with anti-CALR rabbit purified polyclonal antibody 1:1200 and anti-B2M mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Specification

Product Description

This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the CALR protein, and the other against the B2M protein for use in [in situ Proximity Ligation Assay](#). [See Publication Reference below](#).

Reactivity

Human

Quality Control Testing

Protein protein interaction immunofluorescence result.
Representative image of Proximity Ligation Assay of protein-protein interactions between CALR and B2M. HeLa cells were stained with anti-CALR rabbit purified polyclonal antibody 1:1200 and anti-B2M mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Supplied Product

Antibody pair set content:
1. CALR rabbit purified polyclonal antibody (100 ug)
2. B2M mouse monoclonal antibody (40 ug)
*Reagents are sufficient for at least 30-50 assays using recommended protocols.

Storage Instruction

Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze-thaw cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

- *In situ* Proximity Ligation Assay (Cell)

Gene Info — B2M

Entrez GeneID	567
Gene Name	B2M
Gene Alias	-
Gene Description	beta-2-microglobulin
Omim ID	109700 241600
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a serum protein found in association with the major histocompatibility complex (MHC) class I heavy chain on the surface of nearly all nucleated cells. The protein has a predominantly beta-pleated sheet structure that can form amyloid fibrils in some pathological conditions. A mutation in this gene has been shown to result in hypercatabolic hypoproteinemia
Other Designations	beta chain of MHC class I molecules beta-2-microglobin

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 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]

Other Designations

Sicca syndrome antigen A (autoantigen Ro; calreticulin)|autoantigen Ro

Pathway

- [Antigen processing and presentation](#)
- [Antigen processing and presentation](#)

Disease

- [Arthritis](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease](#)
- [Edema](#)
- [Edema](#)
- [Gastritis](#)
- [Genetic Predisposition to Disease](#)

- [Kidney Failure](#)
- [Osteoarthritis](#)
- [Parkinson disease](#)
- [Stomach Neoplasms](#)