CALR & F8 Protein Protein Interaction Antibody Pair

Catalog # DI0179 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CALR and F8. HeLa cells were stained with anti-CALR rabbit purified polyclonal antibody 1:1200 and anti-F8 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-prot ein interaction, one against the CALR protein, and the other against the F8 protein for use in <u>in situ P</u> <u>roximity Ligation Assay</u> . <u>See Publication Reference below</u> .
Reactivity	Human
Quality Control Testing	Protein protein interaction immunofluorescence result. Representative image of Proximity Ligation Assay of protein-protein interactions between CALR and F8. HeLa cells were stained with anti-CALR rabbit purified polyclonal antibody 1:1200 and anti-F8 m ouse 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. F8 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 tha w cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

• In situ Proximity Ligation Assay (Cell)

Gene Info — CALR		
Entrez GenelD	<u>811</u>	
Gene Name	CALR	
Gene Alias	CRT, FLJ26680, RO, SSA, cC1qR	
Gene Description	calreticulin	
Omim ID	<u>109091</u>	
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 lgG and IgM classes. [provided by RefSeq	
Other Designations	Sicca syndrome antigen A (autoantigen Ro; calreticulin) autoantigen Ro	

Gene Info — F8	
Entrez GenelD	<u>2157</u>
Gene Name	F8
Gene Alias	AHF, DXS1253E, F8B, F8C, FVIII, HEMA
Gene Description	coagulation factor VIII, procoagulant component
Omim ID	<u>306700</u>

🖗 Abnova	Product Information
Gene Ontology	Hyperlink
Gene Summary	This gene encodes coagulation factor VIII, which participates in the intrinsic pathway of blood coa gulation; factor VIII is a cofactor for factor IXa which, in the presence of Ca+2 and phospholipids, c onverts factor X to the activated form Xa. This gene produces two alternatively spliced transcripts. Transcript variant 1 encodes a large glycoprotein, isoform a, which circulates in plasma and asso ciates with von Willebrand factor in a noncovalent complex. This protein undergoes multiple cleav age events. Transcript variant 2 encodes a putative small protein, isoform b, which consists prima rily of the phospholipid binding domain of factor VIIIc. This binding domain is essential for coagula nt activity. Defects in this gene results in hemophilia A, a common recessive X-linked coagulation disorder. [provided by RefSeq
Other Designations	OTTHUMP0000061446 OTTHUMP00000196174 coagulation factor VIII coagulation factor VIIIc f actor VIII F8B procoagulant component

Pathway

- Antigen processing and presentation
- <u>Complement and coagulation cascades</u>

Disease

- <u>Abortion</u>
- <u>Activated Protein C Resistance</u>
- <u>Anemia</u>
- Arteriosclerosis
- <u>Atherosclerosis</u>
- <u>Autoimmune Diseases</u>
- <u>Cardiovascular Diseases</u>
- <u>Cardiovascular Diseases</u>
- <u>Cerebral Hemorrhage</u>
- <u>Cerebrovascular Disorders</u>
- <u>Chromosome Inversion</u>
- <u>Coronary Disease</u>

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Product Information

- Diabetes Mellitus
- Diabetes Mellitus
- Disease Progression
- Edema
- Edema
- Fetal Growth Retardation
- Genetic Predisposition to Disease
- Hemophilia A
- <u>Hyperlipidemias</u>
- Hypertension
- Inversion
- Ischemic Attack
- <u>Migraine Disorders</u>
- <u>Myocardial Infarction</u>
- <u>Recurrence</u>
- <u>Retinal Artery Occlusion</u>
- <u>Retinal Vein Occlusion</u>
- Stroke
- Thromboembolism
- Thrombophilia
- Thrombosis
- <u>Venous Thrombosis</u>