Calreticulin monoclonal antibody (FMC 75)

The multifunctional, multi -compartmental protein Calreticulin (Crt) functions as a soluble molecular chaperone of new or misfolded proteins, as well as a Ca2+-binding protein. Most abundant in the ER lumen, Crt expression also occurs in other membrane-bound organelles, the cell surface, and extracellularly. Also known as CRP-55, calregulin and HACBP (high affinity calcium-binding protein), Crt contains the ER-retrieval sequence, KDEL, and is the solub le paralog of the ER membrane protein Calnexin (Cnx). Crt's three domains include a 180 residue N-terminal domain, a proline-rich P domain residues 189 -288) that binds Ca2+ with high affinity and shares homology with Cnx and calmegin, and a 110 residue C-terminal domain that binds Ca2+ with low affinity but high capacity. The P-domain may interact with the co-chaperone ERp57 (Grp58), a thiol reductase. The NMR structure of the P -domain consists of an extended hairpin that appears to form a curved protrusion from the Crt core domain. Both Crt and its membrane bound homolog CNX interact with proteins and glycoproteins possessing monoglucosylated N -glycans. The Crt/Cnx cycle promotes correct folding, inhibits aggregation of folding intermediates, blocks premature oligomerization, regulates ER degradation, and prevents incompletely folded glycoproteins from exiting to the Golgi complex. Crt also appears to function as an auto-antigen in systemic lupus erythematosus, rheumatoid arthritis, celiac disease, complete congenital heart block, and halothane hepatitis. A diversity of additional functions attributed to Crt includes adhesion, blood function, and cardiac and neuronal development gene expression.

This antibody is covered by our Worry-Free Guarantee.

Citations: 35 View Online »

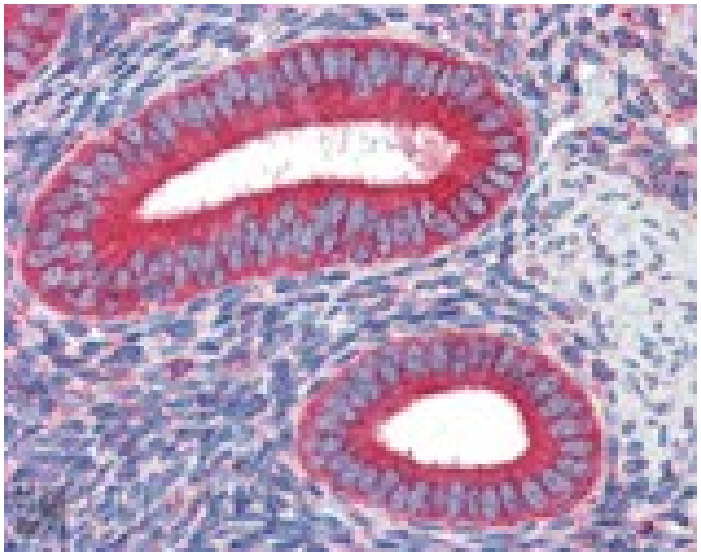
Ordering Information Order Online »

ADI-SPA-601-D	50µg
ADI-SPA-601-F	200µg

Manuals, SDS & CofA View Online »



Western blot analysis of Calreticulin: Lane 1: HeLa (Heat Shocked), Lane 2: Vero.



Immunohistochemistry analysis of human uterus tissue stained with Calreticulin, mAb (FMC 75) at 10µg/ml.

Handling & Storage

Handling	Avoid freeze/thaw cycles.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	CALR, CRT
Application	ICC, IHC (PS), IP, WB
Application Notes	Predicted MW of ~63kDa.
Clone	FMC 75
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
Host	Mouse
Immunogen	Recombinant calreticulin.
Isotype	IgG1
Purity Detail	Protein G affinity purified.
Recommendation Dilutions/Conditions	Immunoprecipitation (12.5µg/ml)Western Blot (1:1,000, ECL)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from ascites
Species Reactivity	Human, Monkey
UniProt ID	P27797 (human)

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