Datasheet for ABIN1344123

Calreticulin Protein (CALR) (His tag)

2 Images

Go to Product page

Overview

Quantity:	50 µg
Target:	Calreticulin (CALR)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Calreticulin protein is labelled with His tag.
Application:	SDS-PAGE (SDS)

Product Details

Cross-Reactivity:	Human
Characteristics:	Human calreticulin (aa18-417) is fused at the C-terminus to a His-tag.
Purity:	>90 % (SDS-PAGE)
Sterility:	0.2 µm filtered
Endotoxin Level:	<1EU/µg purified protein (LAL test, Lonza).

Target Details

Target:	Calreticulin (CALR)
Alternative Name:	Calreticulin (CALR Products)
Background:	Calreticulin is involved in regulation of intracellular Ca2+ homoeostasis and ER Ca2+ capacity. It constitutes together with calnexin and ERp57 the 'calreticulin/calnexin cycle' that is

Target Details

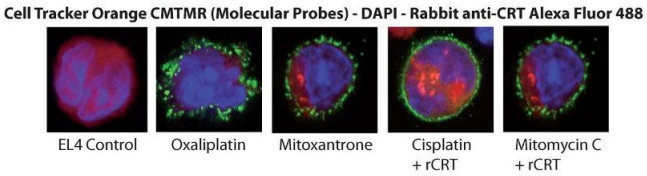
	responsible for folding and quality control of newly synthesized glycoproteins. Calreticulin has been implicated to play a role in many biological systems, including functions inside and outside the ER, indicating that the protein is a multi-process molecule. Recently, Calreticulin was shown to enhance the merger of macrophages and tumor cells, increasing phagocytosis.
Molecular Weight:	~55kDa (SDS-PAGE)
UniProt:	P27797
Pathways:	Retinoic Acid Receptor Signaling Pathway, Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Nuclear Hormone Receptor Binding, ER-Nucleus Signaling, Unfolded Protein Response

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

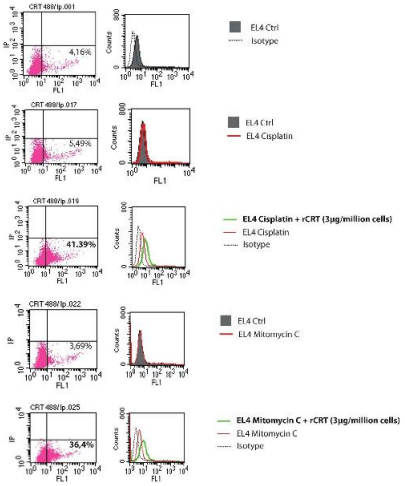
Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	0.2µm-filtered solution in 55 mM TRIS-Cl, pH 8.2, containing 150 mM NaCl.
Storage:	4 °C,-20 °C
Storage Comment:	Short Term Storage: +4°C Long Term Storage: -20°C Working aliquots are stable for up to 3 months when stored at -20°C.
Expiry Date:	3 months



Immunofluorescence

Image 1. Immunofluorescence Cells were possibly incubated with rCRT , Adipogen) and stained with the same protocol than for FACS analysis. Then, cells resuspended in 100mL of PBS were seeded on polylysine slides for 15 min then fixed with 100mL of 4% PFA add on the cells for 15 min. Drops were gently aspirated before using the mounting medium including DAPI from Vectashield. Slides were then analyzed by confocal microscopy. Oxaliplatin (150mM, Sanofi Aventis) and mitoxanthron (1mM, Sigma) treated cells were used as positive control. Pictures courtesy of Prof. Guido Kroemer, INSERM, Paris.



Flow Cytometry

Image 2. Flow cytometric analysis of CRT on the cell surface 3.10 5 EL4 Thymoma cells, growing in suspension in RPMI 1640 (Gibco) supplemented medium were plated in 12-well plates and treated with mitomycin C (30mM, Sanofi Aventis) or cisplatin (25mM, Sigma) for 4h. Cells were harvested, washed once with cold PBS and possibly resuspended in 200mL of cold PBS containing 1mg of recombinant Calreticulin , Adipogen) for 30 minutes on ice. After one wash with cold PBS, cells were fixed in 0.25% paraformaldehyde (PFA) in PBS for 5 minutes. After washing again once with cold PBS, cells were incubated for 30min with primary antibody, diluted in cold blocking buffer (2% FBS in PBS), followed by washing and incubation with the Alexa488-conjugated monoclonal secondary antibody in blocking buffer (30 min). Each sample was then analyzed by FACScan (Becton Dickinson) to identify cell-surface Calreticulin. Secondary antibody alone was used as an isotype control, and the fluorescent intensity of stained cells was gated on propidium iodide (PI) negative cells. Pictures courtesy of Prof. Guido Kroemer, INSERM, Paris.

