CalRexin™:568

enhancing life by focussing on cell death

CalRexin™:568: used for the detection of apoptosis

CalRexin™ research reagents

For use in live cell assays to study pre-apoptotic stress and events leading to apoptosis.

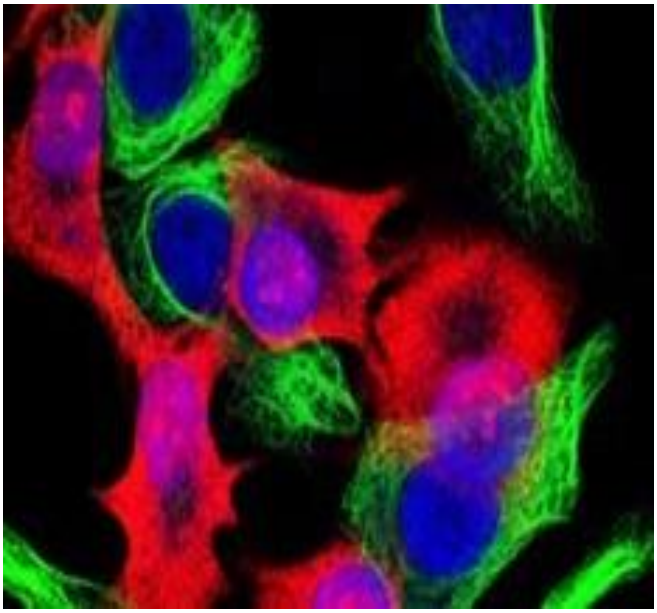

Image showing CalRexin™:568 accumulating in dying cells as seen with confocal microscopy.

- MG63 cancer cells treated with a cytotoxin.
- Green cells express tubulin and are intact living cells that exclude CalRexin™:568.
- Red cells are dying, tubulin is degraded and CalRexin™:568 accumulates.

Image taken from Furness et al, 2016.

features

- Stable product equating to long shelf life
- Targets a new event of PCD
- Increased fidelity (accuracy and specificity)
- Simple to use
- Degree of labelling >4.5 resulting in extensive range of fluorescence signal

in use

format	1 mg/mL
quantity	200 µg in 200 µL PBS
specificity	CALCITONIN RECEPTOR
storage	12 months at 4-6˚C

product number

CalRexin™:568

description

Monoclonal antibody: fluorophore conjugate

order

www.apopbiosciences.com

datasheet	CalRexin™:568
description	MOUSE ANTI-HUMAN CALCITONIN RECEPTOR
specificity	CALCITONIN RECEPTOR
format	Purified, 1 mg/mL in phosphate buffered saline (PBS), sterile filtered.
product type	Monoclonal antibody mAb2C4 conjugated with TFP esterAZ568
clone	46/08-2C4-2-2-4
antibody	The name given to mAb2C4 is CalRexin™
isotype	IgG1
quantity	200 µg in 200 µL PBS

product details

applications

This product has been reported to work with the following applications. This information is derived from testing within our laboratories, peer-reviewed publications, and personal communications from the originators. Please refer to references indicated for further information.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			1:100-1:200
Immunocytochemistry – Live*	•			2.0 µL/mL
Immunohistology - Paraffin		•		
Immunohistology - Resin		•		
ELISA		•		
Immunoprecipitation		•		
Immunoblotting		•		

Where CalRexin™:568 has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the reagent for use in their own system using appropriate negative/positive controls.

**Note that cells undergoing programmed cell death must be unfixed during the stain but may be fixed afterwards.*

target species

Human cells and cell lines

species cross reactivity

Not tested

product form

CalRexin™:568 conjugate in phosphate buffered saline (PBS), sterile filtered.

preparation

Conjugation to antibody as recommended by Fluoroprobes (Arizona, US), the manufacturer of TFP esterAZ568. Purified by peptide affinity and size exclusion chromatography.

preservative stabilisers

N/A

approx. protein concentrations

IgG concentration 1.0 mg/mL

immunogen

Synthetic peptide derived from sequence situated in the N-terminal domain of human calcitonin receptor.

external human protein id: database links

NP_001733.1

specificity

CalRexin™:568 recognises and binds an epitope within the N-terminal domain that is common to both C1a and C1b isoforms of the human calcitonin receptor, a membrane protein with seven transmembrane domains that is coupled to G protein messenger systems. The calcitonin receptor has been identified in a broad range of tissues throughout the life cycle of an organism as well as in diseased, stressed and damaged tissues. CalRexin™:568 is accumulated into apoptotic cells.

histology

Immunocytochemistry: MG63 cells treated with staurosporine accumulate CalRexin™:568 in the lysosomes during apoptosis. Other cell types respond in a similar way (refer to reference below).

storage

Storage for 12 months at 4-6˚C after filter sterilization. Do not freeze. Prepare working dilutions on day of use.

shelf-life

Storage at 4-6˚C for 12 months.

health and safety

Refer to safety information in regard to AZ568 (Fluoroprobes, AZ, US).

reference for mAb2C4

Furness SGB, Hare DL, Kourakis A, Turnley AM, Wookey PJ. A novel ligand of calcitonin receptor reveals a potential new sensor that modulates programmed cell death. Cell Death Discovery 2016 Oct 10;2 16062.