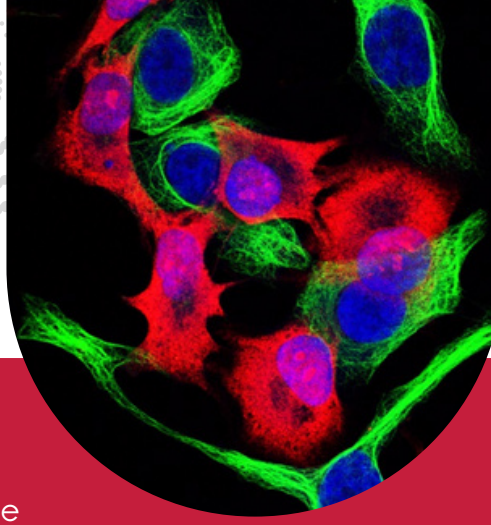
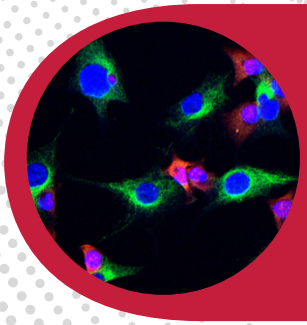
apop BIOSCIENCES

Powering cell stress mechanisms with world-class innovative technologies





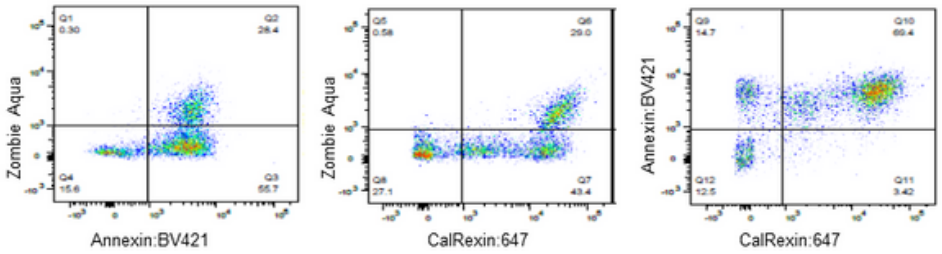
About Us

Apop Biosciences is an Australian biotech at the forefront of developing a range of innovative imaging reagents based on our proprietary calcitonin receptor antibody technology **CalRexin®**.

CalRexin® breakthrough technologies are transforming our knowledge of complex cell stress mechanisms associated with countless diseases.

Apop's suite of proprietary **CalRexin®** imaging reagents target the Calcitonin receptor, a novel marker of stressed cells that are undergoing autophagy and apoptosis. Current diagnostic tools for cell stress mechanisms associated with programmed cell death and autophagy are inadequate, and this is critical to developing and validating novel treatments for a variety of diseases, including cancer, pathogenic infections and neurodegenerative conditions. **CalRexin®** imaging reagents (antibody:fluorophores) can be readily incorporated into standard workflows, provide exceptional image clarity and produce high fidelity data.

Flow cytometry of live Jurkatcells treated with 0.5µM staurosporine and stained with **CalRexin®:647**, annexin:A421 and Zombie Aqua identified live, dying (apoptotic), transition and dead cell populations. Untreated cells and the isotype IgG1:647 control in treated cells were negative.



The upcoming **CalRexin®:Autophagy** imaging reagent stands out as a significant technical advancement in primary screening on high-throughput or high-content platforms for novel modulators of autophagy. Unlike alternatives, it identifies sequential structures of the autophagy pathway from early endosomes to autolysosomes, resists photobleaching and is extremely stable, properties that are essential for multiple imaging of live cells on high-throughput analyzers.

Imaging Reagent Features

CalRexin®:AUTOPHAGY

- ✓ Primary screening reagent for autophagy
- ✓ High throughput screening/high content analyzers e.g. Operetta CLS™
- ✓ Resists Photobleaching
- ✓ Stable > 1 year at 4-6°C

All APOP reagents are for Research Use Only (RUO)

CalRexin®:APOPTOSIS

CalRexin®:488
CalRexin®:568
CalRexin®:647
CalRexin®:680

- ✓ High sensitivity, sub-populations in FACS of dying cells
- ✓ FACS multiplex workflows
- ✓ Live non-invasive imaging
- ✓ Study in cell-based assays, postfixed
- ✓ Calcium independent assay
- ✓ No false positives
- ✓ Stable > 1 year at 4-6° C