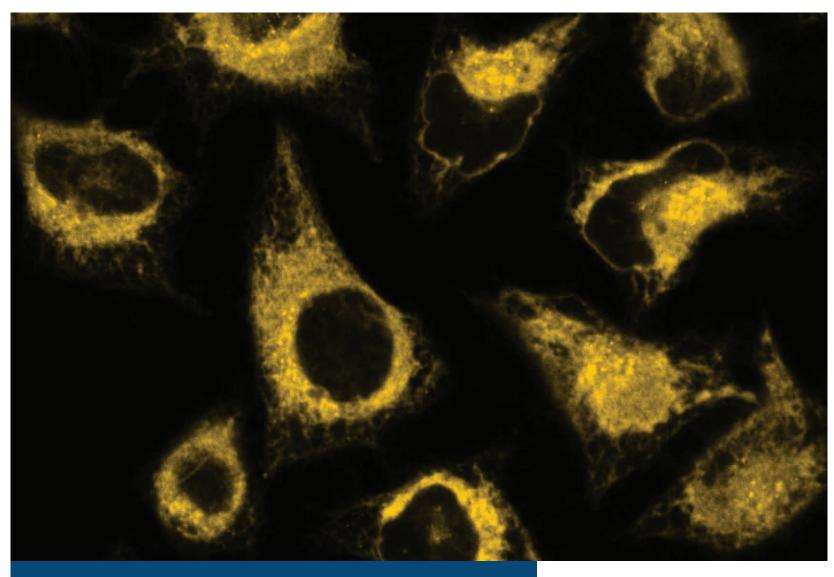


# ReZolve-Alkyne™

A cell permeable luminescent alkyne with large Stokes shift, resistant to photobleaching and long emission life time. Can be conjugated to a range of biological and non-biological chemicals for flexible applications.



#### **REZOLVE SCIENTIFIC Pty Ltd**





# ReZolve-Alkyne™

ReZolve-Alkyne<sup>™</sup> is a cell permeable luminescent alkyne which is ideal for conjugation to a range of biological and non-biological targets by copper facilitated 'click' reactions. This luminescent tag offers a large Stokes shift (Ex/Em 405/570 nm) ideal for fluorescent detection by both microscopy or flow cytometry. This product is also suited to multiphoton microscopy. ReZolve-Alkyne<sup>™</sup> tags are highly resistant to photobleaching, allowing more time for image acquisition. The compound can be stored at room temperature making it an ideal product for your lab bench.

## **Specifications**

Subcellular localisation	User defined
Colour	Orange
For Use With (equipment)	Fluorescence microscopy, flow cytometry, microplate reader, multiphoton microscopy, Raman spectroscopy, Infrared spectroscopy
Tested in	Human cell culture lines (HeLa), murine cell culture lines (H9c2)
Excitation/Emission	UV or 405 / 570 nm
Solubility	DMSO
Shipping	Room Temperature
Storage	Room Temperature

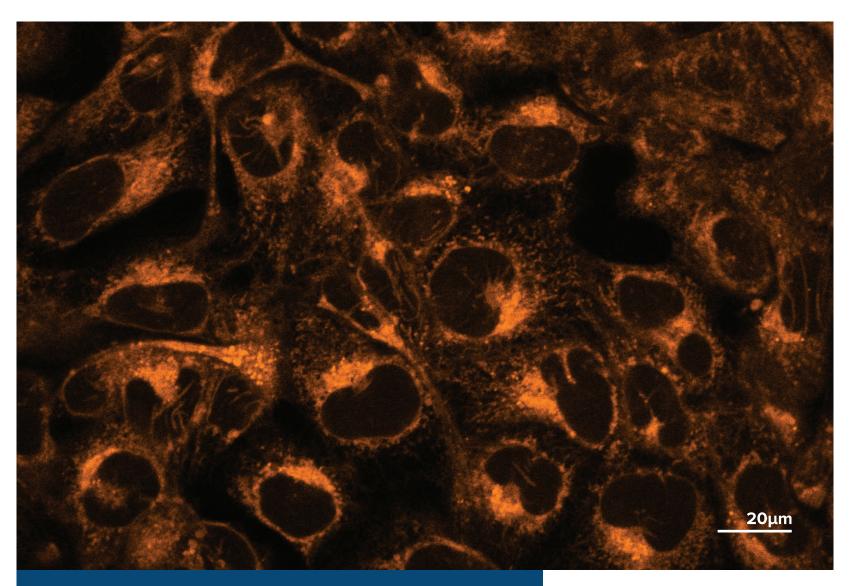






## **ReZolve-ER™**

ReZolve-ER<sup>™</sup> is a live cell imaging agent with rapid cell uptake for imaging the endoplasmic reticulum. For use in a wide variety of live and fixed cells.



#### **REZOLVE SCIENTIFIC Pty Ltd**





## ReZolve-ER™

ReZolve-ER<sup>™</sup> is an endoplasmic reticulum stain for live and fixed cell imaging. This fluorophore is ideal for intermittent or long term monitoring of the endoplasmic reticulum with quick cellular uptake and localisation, low cytotoxicity and high photostability to increase image acquisition time. This product is easily washed from cells allowing flexibility in experimental design.

ReZolve-ER<sup>™</sup> is ideal for fluorescence applications with excitation by UV and 405 nm light sources and emission maximum of 570 nm. This unique excitation/emission profile makes this product compatible with multicolour image. This product is also suitable for multiphoton imaging, further improving compatibility with live cell applications.

## **Specifications**

Subcellular localisation	Endoplasmic reticulum
Colour	Orange
For Use With (equipment)	Fluorescence microscopy, flow cytometry, microplate reader, multiphoton microscopy, Raman spectroscopy, Infrared spectroscopy
Tested in	Human cell culture lines (LNCaP, 22RV1, Du145, PNT1a), mammalian cell culture lines (CHO-K1, H9c2). Mammalian muscle (sheep) and adipose (sheep)
Sample Preparations	Live, paraformaldehyde fixed, cryo-fixed
Excitation/Emission	UV or 405 / 570 nm
Solubility	DMSO
Shipping	Room Temperature
Storage	Room Temperature

#### **Publications**

Imaging nuclear, endoplasmic reticulum and plasma membrane events in real time. (2016) FEBS Lett, 590: 3051–3060.

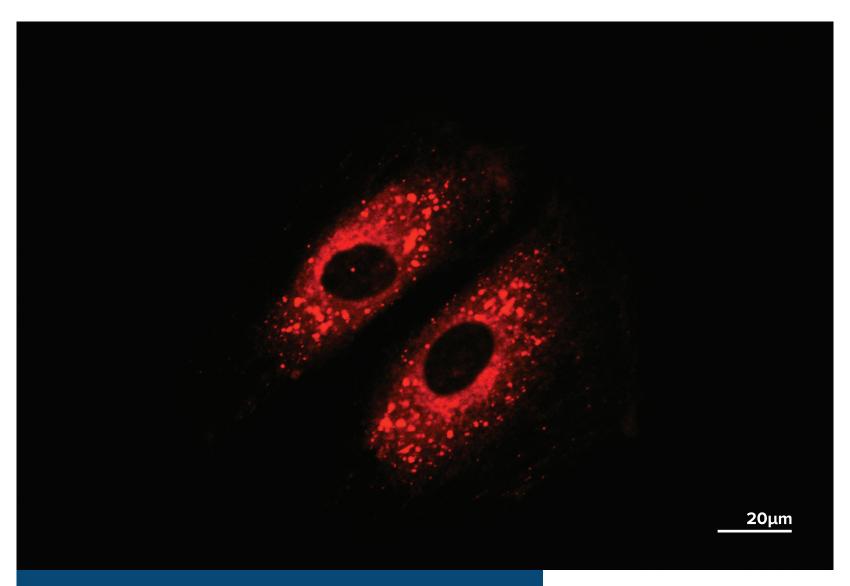






# IraZolve-L1™

IraZolve-L1<sup>™</sup> is a cell-permeant stain that localises with polar lipids and can be used in a wide variety of live and fixed cells. IraZolve-L1<sup>™</sup> provides excellent and rapid lipid staining useful for fluorescent microscopy applications, localising with lipid droplets and the endoplasmic reticulum in cultured cells.



#### **REZOLVE SCIENTIFIC Pty Ltd**





## IraZolve-L1™

Similar to our ReZolve-L1<sup>™</sup>, our red emitting IraZolve-L1<sup>™</sup> has an affinity for lipids which can allow you to monitor changes in cellular lipid localised with lipid droplets and the endoplasmic reticulum. IraZolve-L1<sup>™</sup> provides excellent photostablity and can be useful for a range of fluorescent applications, as it can be excited by UV and standard 405 nm light sources. It is also computable with imaging by multiphoton microscopy. Its large Stokes shift (ex/em 405/600 nm) provides multiple options for dual and multicolour labelling applications.

## **Specifications**

Subcellular localisation	Lipid rich sites
Colour	Red
For Use With (equipment)	Fluorescence microscopy, flow cytometry, microplate reader, multiphoton microscopy
Tested in	Human cell culture lines (22RV1, LNCaP, DU145, PNT1a), murine cell culture lines (H9c2).
Sample Preparations	Live, paraformaldehyde fixed.
Excitation/Emission	UV or 405 / 600 nm
Solubility	DMSO
Shipping	Room Temperature
Storage	Room Temperature

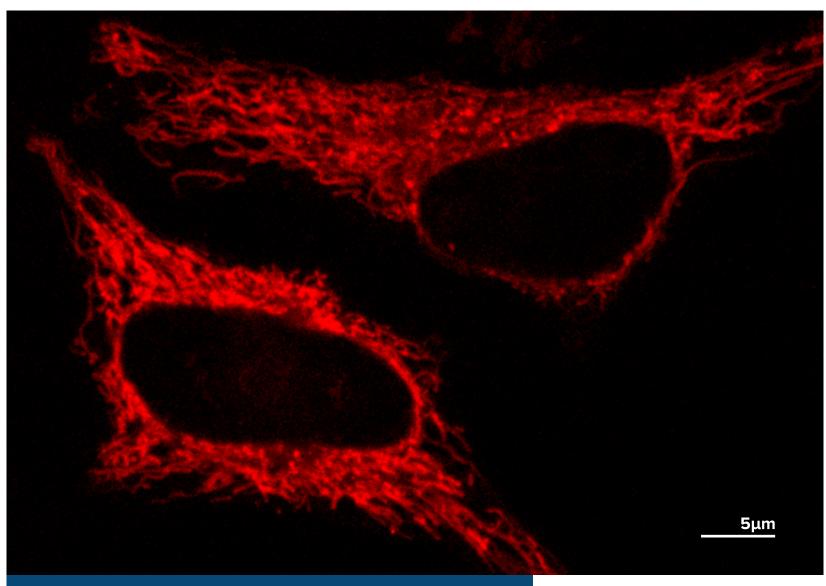






## IraZolve-Mito™

IraZolve-Mito<sup>™</sup> is a mitochondrial marker which is uniquely suitable for the detection of mitochondria in fixed tissue samples. This product can also be used for rapid imaging of mitochondria in live cell and tissues.



#### **REZOLVE SCIENTIFIC Pty Ltd**





## IraZolve-Mito™

IraZolve-Mito<sup>™</sup> localises to mitochondria in live cells and tissues. This product has also been proven to be successful for the detection of mitochondria in paraformaldehyde and cyro-fixed tissue. This cell permeable stain allows mitochondrial detection in tissue samples in one step with no requirement for tissue permeabilization or even sectioning. IraZolve-Mito<sup>™</sup> has been trialled in paraformaldehyde and cryo-fixed sheep skeletal muscle, cardiac muscle and adipose tissue. It has also been tested for use in live mammalian cell lines and tissues.

## **Specifications**

Subcellular localisation	Mitochondria
Colour	Red
For Use With (equipment)	Fluorescence microscopy, flow cytometry, microplate reader, multiphoton microscopy
Tested in	Human cell culture lines (HeLa), murine cell culture lines (H9c2). Mammalian muscle (sheep) and adipose (sheep) tissues.
Sample Preparations	Live cells and tissues; paraformaldehyde fixed, cryo-fixed tissues
Excitation/Emission	UV or 405 / 600 nm
Solubility	DMSO
Shipping	Room Temperature
Storage	4°C after reconstitution in DMSO.

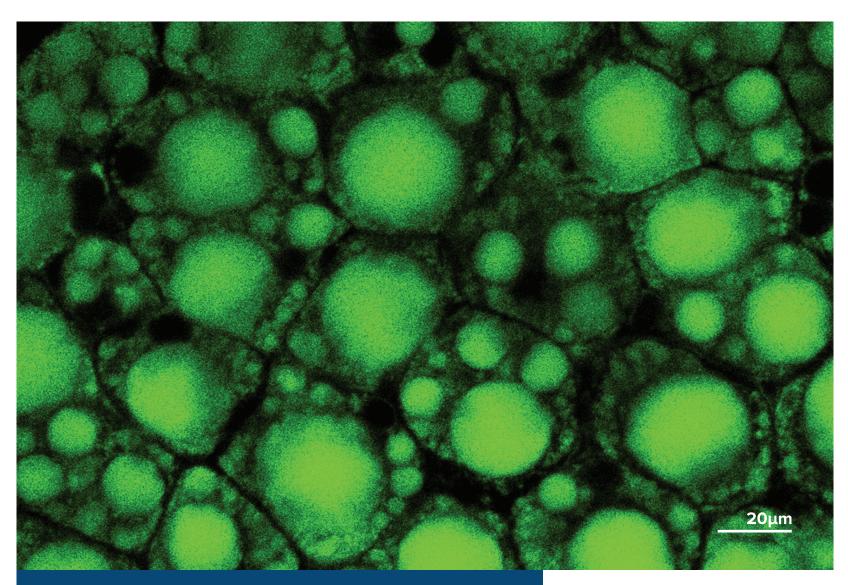






## ReZolve-L1™

ReZolve-L1<sup>™</sup> is a cell-permeant stain which has an affinity for polar lipids and can be used in a wide variety of live and fixed cells. This stain is an effective tool for monitoring cellular lipid content and localisation (e.g. phosphatidylcholine, phosphatidylethanolamine, sphingomyelin, sphingosine and lysophosophatidic acid).



#### **REZOLVE SCIENTIFIC Pty Ltd**





## ReZolve-L1TM

ReZolve-L1<sup>TM</sup> lets you monitor cellular lipid content with its affinity for polar lipids (e.g. phosphatidylcholine, phosphatidylethanolamine, sphingomyelin, sphingosine and lysophosophatidic acid). ReZolve-L1<sup>TM</sup> provides excellent photostablity and can be useful for a range of fluorescent applications, as it can be excited by UV and standard 405 nm light sources. It is also computable with imaging by multiphoton microscopy and vibration spectroscopy techniques. Its large Stokes shift (ex/em 405/570 nm) provides multiple options for dual and multicolour labelling applications.

This cell permeable lipid stain has low cytotoxicity, which makes it ideally suited to live cell imaging, but can also be used for fixed biological samples. ReZolve-L1<sup>TM</sup> is easy to use with minimal sample preparation. This product has been used for monitoring lipids in live and fixed cell culture lines including murine cardiomyocytes (H9c2), murine adipocytes (3T3-L1) and human prostate cell lines (LNCaP, 22RV1, Du145 and PNT1a). Stain has been used on mammalian and insect tissues including sheep muscle and adipose tissue (live and fixed), murine brain and Drosophila larval gut and fatbody.

## **Specifications**

Subcellular localisation	Lipid rich sites
Colour	Yellow
For Use With (equipment)	Fluorescence microscopy, flow cytometry, microplate reader, multiphoton microscopy, Raman spectroscopy, Infrared spectroscopy
Tested in	Human cell culture lines (LNCaP, 22RV1, Du145, PNT1a), murine cell culture lines (H9c2, 3T3-L1). Mammalian brain (murine), muscle (sheep) and adipose (sheep) tissues, Drosophila gut and adipose tissue
Sample Preparations	Live, paraformaldehyde fixed, cryo-fixed
Excitation/Emission	UV or 405 / 550 nm
Solubility	DMSO
Shipping	Room Temperature
Storage	Room Temperature

#### **Publications**

Modulation of the organelle specificity in Re(I) tetrazolato complexes leads to labelling of lipid droplets. (2014) RSC Advances 4, 16345-16351.

Unprecedented staining of polar lipids by a luminescent rhenium complex revealed by FTIR microspectroscopy in adipocytes. (2016) Mol. BioSyst 12, 2064

A molecular probe for the detection of polar lipids in live cells. (2016) PLoS ONE 11(8): e0161557.

Intracellular distribution and stability of a luminescent rhenium(I) tricarbonyl tetrazolato complex using epifluorescence microscopy in conjunction with X-ray fluorescence imaging. (2017) Metallomics 9, 382.

#### **REZOLVE SCIENTIFIC Pty Ltd**

