Biosensis ER-O Endoplasmic Reticulum Tracing Reagent

Catalogue No.: TR-601-ER1

Description: TR-601-ER1 is a cell-permeant stain for the endoplasmic reticulum. TR-601-ER1 passively diffuses across the plasma membrane into the cell, stains at low concentrations and has minimal cytotoxic effects. It can be used as a real-time imaging reagent which can be imaged within minutes of addition and has minimal photobleaching. TR-601-ER1 is easily washed from cells, and therefore is ideal for protocols which require intermittent monitoring of endoplasmic reticulum structures. This tracing reagent can be used on live and fixed samples and is compatible with other dyes. TR-601-ER1 has a large Stokes Shift, shows excellent resistance to photobleaching and demonstrates low cytotoxicity. TR-601-ER1 is manufactured by ReZolve Scientific.

Related products: Biosensis ER-B Endoplasmic Reticulum Tracing Reagent (Ex/Em = 405/500 nm), TR-605-ER2

Batch No.: Please refer to the product label.

Unit size: 1.8 mg

Applications: Fluorescent imaging of the endoplasmic reticulum compartment. Sample types: live cells, fixed cells (4% paraformaldehyde), tissue (frozen only). Epifluorescence microscopy: YES. Confocal microscopy: YES. Multiphoton imaging: YES. Infrared spectroscopy: NO. Raman spectroscopy: NO. Ex/Em: 405 nm / 570 nm. Typical working dilution is 1:100 - 1:200 (50-100 μM) in appropriate buffer or cell culture medium. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.

Specificity: Cell penetration and localisation of TR-601-ER1 has been confirmed in a range of cell lines, including prostate cells (PNT2, PNT1a, LNCaP, 22RV1 and DU145), cardiomyocytes (H9c2) and neuronal cells (PC-12).

Reconstitution: Spin vial briefly before opening. Reconstitute TR-601-ER1 with 300 μL of DMSO to obtain a 10 mM stock solution, mix thoroughly before use. Avoid PBS or cell culture medium for reconstitution.

Storage: Product is shipped at room temperature. Store lyophilised product at room temperature, properly sealed and protected from light. Stock solution can be stored at room temperature, properly sealed and protected from light. Working solutions should be used immediately and not stored for later use.

Expiry Date: Lyophilised product is stable for 6 months at room temperature after purchase, if protected from light. After reconstitution in DMSO, liquid 10 mM stock solution is stable for 6 months at room temperature.


Reagent Kit protocol: Please refer to our online product listing for current protocol/MSDS versions.

MSDS: Please refer to our online product listing for current protocol/MSDS versions.
Comparison of TR-601-ER1 with ER-Tracker (upper panel). TR-601-ER1 can be used to stain the endoplasmic reticulum in live and fixed cells (lower panel).