For research purposes only, not for human use

Product Data Sheet

Lysosome Red Probes

Catalog #	Source	Reactivity	Applications
CRG1108			IF

Description Red Fluorescent acidotropic probes for labeling and tracking acidic organelles in live cells

Specificity Weakly basic amines selectively accumulate in cellular compartments with low internal pH and can be used to investigate the biosynthesis and pathogenesis of lysosomes. The Lysosome Red Probes are fluorescent acidotropic probes for labeling and tracking acidic organelles in live cells. These probes have several important features, including high selectivity for acidic organelles and effective labeling of live cells at nanomolar concentrations.

Form Liquid

Application The Lysosome Red Probes, which consist of a fluorophore linked to a weak base that is only partially protonated at neutral pH, are freely permeant to cell membranes and typically concentrate in spherical organelles. Their mechanism of retention has not been firmly established but is likely to involve protonation and retention in the membranes of the organelles, although staining is generally not reversed by subsequent treatment of the cells with weakly basic cell-permeant compounds. Note that in Lysosome Red Probes stained cells, the lysosomal fluorescence may constitute only a small portion of total cellular fluorescence, making it difficult to quantitate the number of lysosomes by flow cytometry or fluorometry.

Directions for Use

1. Prepare the working solution

Add Lysosome Red Probes to the cell culture medium at the ratio of 1:10,000 - 1:20,000. The final concentration is 50-100 nM. The working solution can be warmed at 37°C before use.

2. Label the lysosomes

For adherent cells, discard the cell medium and wash with 1 x PBS. Adding the working solution, and incubate the cells at 37°C for 30 mins to 2 hours. Discard the

working solution, wash with 1 x PBS for three times, and then photographed under a fluorescence microscope.

For suspension cells, centrifuge to obtain a cell pellet and aspirate the supernatant. Resuspend the cells gently in probe-containing medium, and incubate the cells at 37°C for 30 mins to 2 hours. Centrifuge to obtain a cell pellet and aspirate the supernatant, wash with 1 x PBS for three times, and then photographed under a fluorescence microscope.

Notice

1. If the staining effect is not good, the concentration of the probe in the working fluid can increase the concentration of the working solution , or can extend the reaction time.
2. In order to reduce the background, pleasee use lower concentration probes.
3. Take photos quickly, because the dye is easy to quench.

Storage/Stability Store at -20 °C in the dark for 6 months.