

Lysosomal Phosphatase Assay Kit

Product Information

Cat.No.

Kit-0505

Product Overview

Useful for labeling lysosomes in a live-cell format and capable of monitoring lysosomal metabolic activity.

Size

1 kit

Description

Lysosomes are acidic cytoplasmic organelles that are present in all nucleated mammalian cells. Lysosomes have been found to be involved in a variety of cellular processes including repair of the plasma membrane, defense against pathogens, cholesterol homeostasis, bone remodeling, metabolism, apoptosis, and cell signaling. Defects in lysosomal enzyme activity have been associated with a variety of diseases including Parkinson's, Tay-Sachs, Sandhoff, Krabbe, Wolman, and Gaucher syndromes. These targeted substrates are based upon fluorescent probes that have a low pKa value for optimum fluorescence at the lower physiological pH values found in the lysosomes as well as targeting groups to direct their accumulation to the lysosomes using a live-cell staining format.

Storage

The LysoliveTM PhosGreen and Lysosomal Staining Standard should be stored at -20°C until needed. The Lysosomal Substrate Reagent is packaged in small aliquots for single use to avoid repeat freeze/thaw cycles. Both the Lysosomal Substrate Reagent and Lysosomal Staining Standard should be protected from light. Prolonged exposure of labeled cells to fluorescence lamps can result in photobleaching of the dyes.

Kit Components

A.) LysoliveTM PhosGreen: 10mM in DMSO (10 vials). B.) Lysosomal Staining Standard: 5mg/mL Acridine Orange in DMSO (1 vial). LysoliveTM PhosGreen: 10 X 50 μ L; Lysosomal Staining

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Standard: 1 X 100 μ L Notes: F=store at or below -20°C; C=store cold (4°C); L=light sensitive;
T=avoid repeat freeze/thaw; R=read protocol/instructions carefully prior to use.
