

Product Information

LysoView™ 633

Catalog Number: 70058-T, 70058

Unit Size:

70058-T: 1 vial of lyophilized dye

70058: 10 vials of lyophilized dye.

One vial yields 100 µL of 1000X dye stock solution after reconstitution (see below).

Storage, Handling, and Reconstitution

Store at -20 °C and protect from light. Product is stable for at least 12 months from date of receipt when stored as recommended.

To prepare LysoView™ 633, 1000X stock solution in water: Briefly centrifuge vial to collect any loose material from cap before opening. Add 100 µL dH₂O to one vial of lyophilized dye and vortex to mix. Stock solution is stable for at least 2 weeks when stored at -20 °C, protected from light.

Spectral Properties

Ex/Em: 634/659 nm (Figure 1)

Product Description

LysoView™ 633 is a far-red stain for imaging lysosome localization and morphology in live cells. Lyso-somotropic dyes like LysoView™ 633 possess weakly basic amine groups. It is hypothesized that protonation of weak bases under acidic conditions causes the dyes to be trapped in the low pH compartment of the lysosome.¹ In addition, the fluorescence of LysoView™ 633 is pH-sensitive (Figure 1), resulting in highly specific lysosomal staining without the need for a wash step (Figure 2).

References

1. J Cell Biol 106, 539 (1988).

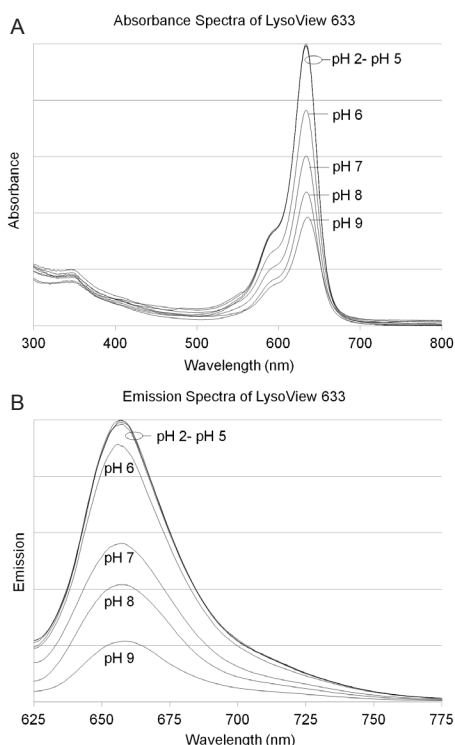


Figure 1. Absorbance (A) and emission (B) spectra of LysoView 633 at varying pH.

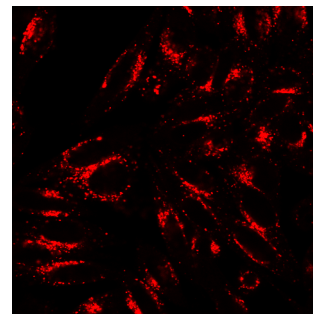


Figure 2. Live HeLa cells stained with LysoView 633.

Staining Protocol

1. Prepare 1000X LysoView 633 stock solution as described under Storage, Handling, and Reconstitution.
2. Dilute LysoView 633 in cell culture medium to a final concentration of 1X.
Note: 1X LysoView 633 is recommended as a initial concentration for testing. The final dye concentration may require optimization for different cell types. The lowest dye concentration that gives good staining results should be used to minimize potential biological effects of the dye.
3. Incubate live cells with diluted LysoView 633 for 30 minutes at 37°C.
Note: Staining may require as little as 5 minutes. Staining time can be varied depending on cell type and application. HeLa cells incubated with the dye show no obvious signs of toxicity after overnight incubation with 1X dye, but toxicity may vary by cell type.
4. Image cells using excitation/emission settings for far-red dyes (such as Cy®5). No wash step is required before imaging.

Note: LysoView 633 staining is retained after subsequent fixation with formaldehyde, but staining is not compatible with detergent or solvent permeabilization.

Related Products

Catalog number	Product
70059	LysoView™ 650
70061	LysoView™ 540
70052	MitoView™ Blue
70060	Light-On LysoView™ 555
70054	MitoView™ Green
70055	MitoView™ 633
40081	NucSpot™ Live 488 Nuclear Stain
40082	NucSpot™ Live 650 Nuclear Stain
40060	RedDot™ 1 far-red nuclear stain for live cells
40061	RedDot™ 2 far-red nuclear stain for dead or fixed cells
70062	ViaFluor™ 488 Live Cell Microtubule Stain
70063	ViaFluor™ 647 Live Cell Microtubule Stain

Please visit our website at www.biotium.com for information on our life science research products, including fluorescent CF™ dye conjugates of transferrin, cholera toxin subunit B, lectins, and Annexin V for cellular imaging, plus many more fluorescent probes and kits for cellular and molecular biology research.

Materials from Biotium are sold for research use only, and are not intended for food, drug, household, or cosmetic use.

Cy5 is a registered trademark of GE Healthcare.