

LumiTracker® Lyso Blue

<http://www.lumiprobe.com/p/lumitracker-lyso-blue-dnd-22>

LumiTracker® Lyso Blue is a blue-emitting dye that selectively accumulates in cellular organelles with acidic contents. It is widely used to stain live lysosomes that maintain a low internal pH by an ATP-dependent proton pump providing optimal conditions for the activity of digestive enzymes.

LumiTracker® Lyso Blue contains several amino groups that act as a weak base. At neutral pH, they are not completely protonated, and the dye molecule remains relatively neutral, thus allowing better cell membrane permeability. Getting into lysosomes with an acidic pH, the dye is likely to become protonated and thus remains in the organelle with a low pH.

Live-cell labeling is performed using nanomolar concentrations of LumiTracker® Lyso Blue without the use of detergents. The protonation of the dye promotes local alkalizing, so it is recommended to perform staining of living cells for no more than 7 minutes just before visualization with fluorescent microscopy.

LumiTracker® Lyso Blue exhibits an absorption maximum at 373 nm and an emission maximum at 422 nm. We also offer [LumiTracker® Lyso Green](#) and [LumiTracker® Lyso Red](#) for lysosome imaging in the green and red channels.

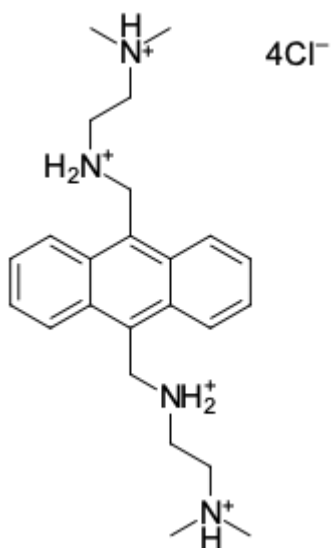
LumiTracker® Lyso Blue is supplied as a 1 mM solution in DMSO.

Usage

Working concentration: 50–75 nM.*

Staining: 3–7 minutes at 37 °C in 1× PBS (just before visualization).

**Depending on the cell line, working concentration or incubating time may be changed*



Structure of LumiTracker® Lyso Blue

General properties

Appearance: yellow liquid

Molecular weight: 524.41

CAS number: 215247-93-1

Molecular formula: C₂₄H₃₈Cl₄N₄

Quality control: NMR ¹H and HPLC-MS (95+%)

Storage conditions: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

Legal statement: This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

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