

NucSpot® Live Cell Nuclear Stains

No-wash, fluorescent DNA nuclear stains dyes with low toxicity for long-term live cell imaging or fixed cell staining. Choose green or far-red fluorescence.



Product Description

NucSpot® Live Cell Nuclear Stains are cell membrane-permeant DNA dyes that specifically stain nuclei in live or fixed cells. They have excellent specificity for DNA without the need for a wash step, with low toxicity for live cell imaging.

NucSpot® Live 488 stains nuclei with green fluorescence for the FITC channel, while NucSpot® Live 650 has far-red fluorescence for the Cy5 channel. NucSpot® Live 650 dye also is compatible with super-resolution imaging by SIM or STED, and has been validated in STORM ([Ref. 4](#)). The dyes are supplied as 1000X stock solutions in DMSO, and are supplied with a vial of the efflux pump inhibitor verapamil for optional use, which may increase probe retention and live cell staining in some cell types. Note: NucSpot® Live 488 and NucSpot® Live 650 have dim blue fluorescence in the DAPI channel, and may not be suitable for multicolor imaging with blue probes.

NucSpot® Live Cell Nuclear Stains can be used to stain live gram-positive bacteria, but do not stain live gram-negative bacteria or yeast. See our [Cellular Stains Table](#) for more information on how our dyes stain various organisms.

Biotium also offers [NucSpot® Nuclear Stains](#) for fixed cells in a wide selection of colors from green to near-IR. Also see our wide selection of other [Membrane and Organelle Stains](#), or download the [Cellular Stains Brochure](#).

Cy Dye is a registered trademark of Cytiva.

Product attributes

Dye	NucSpot® Live 488, NucSpot® Live 650
Probe cellular localization	Nucleus
For live or fixed cells	For fixed cells, For live/intact cells
Fixation options	Fix before staining (formaldehyde), Fix after staining (formaldehyde), Fix before staining (methanol), Fix after staining (methanol), Permeabilize after staining
Assay type/options	Long term staining (24-72h), No-wash staining, Real-time imaging
Cell permeability	Membrane permeant
Colors	Green, Far-red
Excitation/Emission	NucSpot® Live 488: 500/515 nm, NucSpot® Live 650: 650/675 nm
Storage Conditions	Store at 2 to 8 °C, Protect from light