

Helixyte™ 14 [Equivalent to SYBR 14]Catalog number: 17564
Unit size: 1 mg**Product Details**

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	462.35
Soluble In	DMSO

Spectral Properties

Excitation Wavelength	489 nm
Emission Wavelength	520 nm

Applications

Helixyte™ 14 has the same chemical structure of SYBR 14 (SYBR is the trademark of ThermoFisher). It is commonly used to monitor the viability of sperms. The proportion of living sperm in semen can be assessed by means of a dual staining technique using the stains SYBR-14 and propidium iodide (PI). Helixyte™ 14 is a nucleic acid stain, maximally absorbs at 488 nm and emits at 518 nm when bound to DNA. It stains the nuclei of living sperm bright green. Conversely, PI stains only nonmotile sperm that had lost their membrane integrity. The proportions of living and dead sperm can be determined by first staining with SYBR-14 and PI and then assessing stain uptake by flow cytometry. The proportions of living and dead sperm in mammalian semen can be readily identified through use of dual staining with SYBR-14 and PI and quantified through use of flow cytometry.