Lumiprobe Corporation
201 International Circle, Suite 135
Hunt Valley, Maryland 21030
USA
Phone: +1 888 973 6353
Fax: +1 888 973 6354
Email: order@lumiprobe.com

Thiazole Orange

http://www.lumiprobe.com/p/thiazole-orange

Thiazole Orange is an asymmetric cyanine dye whose fluorescence highly depends on the local environment. Thiazole Orange is essentially dark in solution; however, its fluorescence increases a thousandfold when Thiazole Orange is introduced into double-stranded DNA and RNA (dsDNA or dsRNA).

The maximum absorption of Thiazole Orange in complex with DNA is 509 nm, and the maximum emission is 532 nm.

Thiazole Orange solution is widely used for determining the percentage of reticulocytes in human peripheral blood with microscopy and flow cytometry. We also offer the ready-to-use solution of Thiazole Orange LumiCell Reticulocyte Stain for this purpose.

General properties

Appearance:	orange powder / solution
Molecular weight:	432.33
CAS number:	2394903-71-8; 24147-36-2; 107091-89-4 (p-toluenesulfonate)
Molecular formula:	$C_{19}H_{17}IN_2S$
Quality control:	NMR ^1H and HPLC-MS (95+%)
Storage conditions:	24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

Spectral properties

Excitation/absorption maximum, nm:	509
Emission maximum, nm:	532