

Thiazole Orange

UltraPure grade

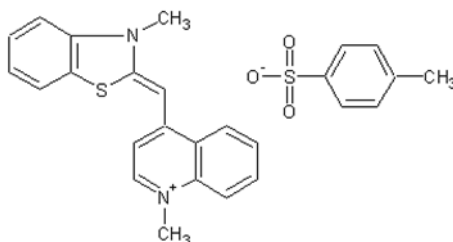
Ordering Information

Product Numbers: 17518 (100 mg)
17519 (10 mL)

Storage Conditions

Avoid exposure to light
Keep at -20°C and desiccated

Chemical and Physical Properties



Molecular Weight: 476.61

Appearance: Red

Solvents: Dimethylsulfoxide (DMSO)

Spectral Properties: Excitation = 512 nm; Emission = 533 nm.

Biological Applications

Thiazole orange is a fluorescent DNA-binding dye for reticulocyte analysis. It is also useful for Plasmodium species analysis. The modified thiazole orange derivatives (such as SYBR Green, PicoGreen, TOTO and YOYO) are widely used for detecting DNA samples.

Sample Protocol for Staining Cells

The following procedure can be adapted for most cell types. Growth medium, cell density, the presence of other cell types and other factors may influence staining. Residual detergent on glassware may also affect real or apparent staining of many organisms, causing brightly stained material to appear in solutions with or without cells present.

- 1). Make 1-10 mM DMSO stock solution. The DMSO stock solution is good for 6 months if stored at -20°C.
- 2). Use the fixation protocol appropriate for your sample.
- 3). Pellet cells by centrifugation and resuspend the cells in buffered salt solutions or media, with optimal dye staining at pH 7.4. Adherent cells in culture may be stained *in situ* on cover slips or in the cell culture wells.
- 4). Add thiazole orange stain using the concentrations between 0.5 and 10 μ M and incubate it for 15 to 60 minutes as a guide.

Note: In initial experiments, it may be best to try several dye concentrations over the entire suggested range to determine the concentration that yields optimal staining.

Disclaimer: This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact our technical service representative for more information.