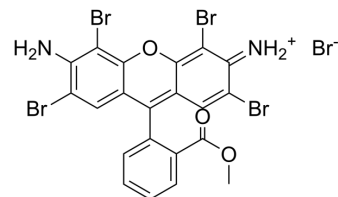


Tetrabromorhodamine 123 bromide

Cat. No.:	HY-D1673
CAS No.:	623903-26-4
Molecular Formula:	C ₂₁ H ₁₃ Br ₅ N ₂ O ₃
Molecular Weight:	740.86
Target:	Fluorescent Dye
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Tetrabromorhodamine 123 (TBR) bromide is a photosensitizer. Tetrabromorhodamine 123 bromide can be used for the research of photo dynamic therapy (PDT) and cancer ^[1] .
In Vitro	<p>Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).</p> <p>A. Labeling of Cells:</p> <ol style="list-style-type: none"> 1. Incubate the cells according to your normal protocol. 2. Cells are incubated with DMEM containing 5 μM TBR and maintained in the dark in a CO₂ incubator at 37°C. 3. After 1 h, change the medium to normal culture medium without phenol red, and cells were exposed to visible light with a 500 W Xe arc with a filter. <p>B. The intracellular localization of TBR:</p> <ol style="list-style-type: none"> 1. Cells are cultured in 35 mm diameter glassbottomed dishes for 48 h. Incubate the cells according to your normal protocol. 2. For triple-staining, medium is changed to a solution containing BODIPY-TR ceramide (5 μM). 3. Cells are incubated at 48°C for 20 min and then further incubated at 37°C for 1 h, after which the solution is changed to normal medium containing 5 μM TBR. 4. The stock solution (1 mM) of Hoechst 33342 was added to the medium (final concentration, 100 μM), and cells were incubated for 15 min. 5. Cells are washed with phosphate-buffered saline (plus Ca²⁺, Mg²⁺) and then observed with the aid of confocal laser scanning microscopy (LSM). <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Maiko Ogata, et al. Ca(2+)-dependent and caspase-3-independent apoptosis caused by damage in Golgi apparatus due to 2,4,5,7-tetrabromorhodamine 123 bromide-induced photodynamic effects. Photochem Photobiol. 2003 Sep;78(3):241-7.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA