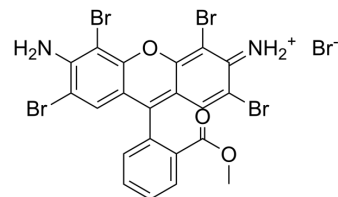


## Tetrabromorhodamine 123 bromide

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



### BIOLOGICAL ACTIVITY

<b>Description</b>	Tetrabromorhodamine 123 (TBR) bromide is a photosensitizer. Tetrabromorhodamine 123 bromide can be used for the research of photo dynamic therapy (PDT) and cancer <sup>[1]</sup> .
<b>In Vitro</b>	<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"> <li>1. Incubate the cells according to your normal protocol.</li> <li>2. Cells are incubated with DMEM containing 5 μM TBR and maintained in the dark in a CO<sub>2</sub> incubator at 37°C.</li> <li>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.</li> </ol> <p>B. The intracellular localization of TBR:</p> <ol style="list-style-type: none"> <li>1. Cells are cultured in 35 mm diameter glassbottomed dishes for 48 h. Incubate the cells according to your normal protocol.</li> <li>2. For triple-staining, medium is changed to a solution containing BODIPY-TR ceramide (5 μM).</li> <li>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.</li> <li>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.</li> <li>5. Cells are washed with phosphate-buffered saline (plus Ca<sup>2+</sup>, Mg<sup>2+</sup>) and then observed with the aid of confocal laser scanning microscopy (LSM).</li> </ol> <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