

## DHR 123 [Dihydrorhodamine 123]

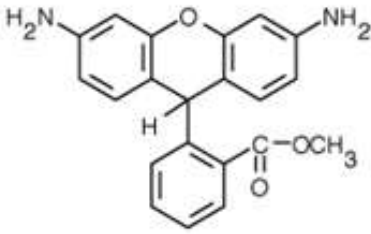
Catalog Number	Packaging Size
C261	10 mg

**Storage upon receipt:** -20°C, protected from light

### Introduction

**Dihydrorhodamine 123** is the reduced form of rhodamine 123, which is a commonly used fluorescent mitochondrial dye. Dihydrorhodamine 123 itself is non-fluorescent, but it readily enters most of the cells and is oxidized by oxidative species or by cellular redox systems to the fluorescent rhodamine 123 that accumulates in mitochondrial membranes. Dihydrorhodamine 123 is useful for detecting reactive oxygen species including superoxide and peroxynitrite.

### Specifications

<b>Label:</b>	Rhodamine 123	
<b>Ex/Em:</b>	507/529 nm	
<b>Detection Method:</b>	Fluorescent	
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>18</sub> N <sub>2</sub> O <sub>3</sub>	
<b>Molecular Weight:</b>	346.38	
<b>CAS Number:</b>	109244-58-8	
<b>Storage Conditions:</b>	-20°C, protected from light	
<b>Shipping Condition:</b>	Room Temperature	

### Applications

Probe for ROS

### References:

1. Superoxide reacts with nitric oxide to nitrate tyrosine at physiological pH via peroxynitrite.  
Reiter CD, Teng RJ, Beckman JS  
J Biol Chem (2000) 275:32460-32466
2. Reaction of superoxide and nitric oxide with peroxynitrite. Implications for peroxynitrite-mediated oxidation reactions in vivo.  
Jourdeuil D, Jourdeuil FL, Kutchukian PS, Musah RA, Wink DA, Grisham MB  
J Biol Chem (2001) 276:28799-28805
3. Modulation of superoxide-dependent oxidation and hydroxylation reactions by nitric oxide.  
Miles AM, Bohle DS, Glassbrenner PA, Hansert B, Wink DA, Grisham MB  
J Biol Chem (1996) 271:40-47