

DHR 123 [Dihydrorhodamine 123]

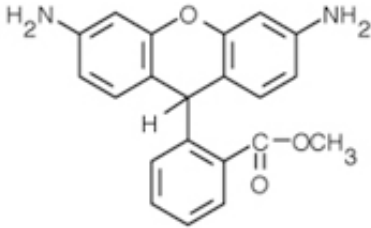
Catalog Number	Packaging Size
C261	10 mg

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

Label:	Rhodamine 123	
Ex/Em:	507/529 nm	
Detection Method:	Fluorescent	
Molecular Formula:	C ₂₁ H ₁₈ N ₂ O ₃	
Molecular Weight:	346.38	
CAS Number:	109244-58-8	
Storage Conditions:	-20°C, protected from light	
Shipping Condition:	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.](#)
Jourdain D, Jourdain 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