

Rhodamine 123

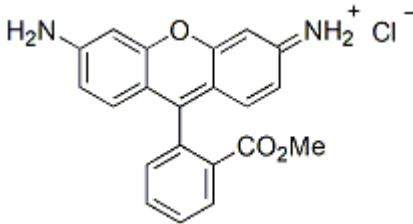
Rhodamine 123 is a popular green fluorescent mitochondrial dye that stains mitochondria in living cells in a membrane potential-dependent fashion. It is widely used in flow cytometry studies involving mitochondrial membrane potential.



Product Description

Rhodamine 123 is a popular green fluorescent mitochondrial dye that stains mitochondria in living cells in a membrane potential-dependent fashion. It is widely used in flow cytometry studies involving mitochondrial membrane potential. Please also see Dihydrorhodamine 123 and its HCl salt ([10055](#) and [10056](#)).

- $\lambda_{\text{Ex}}/\lambda_{\text{Em}}$ (MeOH) = 505/534 nm
- ϵ (505 nm, MeOH) = 97,000
- Orange red solid soluble in DMSO or DMF
- Store at 4°C and protect from light, especially in solution
- $\text{C}_{21}\text{H}_{17}\text{ClN}_2\text{O}_3$
- MW: 381
- [62669-70-9]



References

1. Cytometry 17, 50 (1994).
2. Science 218, 1117 (1982).
3. J Cell Biol 88, 526 (1981).

This datasheet was generated on January 11, 2026 at 05:31:20 PM. Visit product page to check for updated information before use.
Product link: <https://biotium.com/product/rhodamine-123/>

Product attributes

CAS number	62669-70-9
Probe cellular localization	Mitochondria
For live or fixed cells	For live/intact cells
Assay type/options	Real-time imaging
Cell permeability	Membrane permeant
Apoptosis/viability marker	Mitochondrial potential
Potential dependence	Mitochondrial potential-dependent
Colors	Red
Excitation/Emission	505/534 nm