

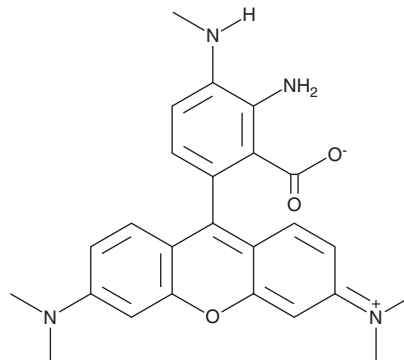
PRODUCT INFORMATION



DAR-4M

Item No. 27897

CAS Registry No.: 339527-79-6
Formal Name: 9-[3-amino-2-carboxy-4-(methylamino)phenyl]-3,6-bis(dimethylamino)xanthylium, inner salt
Synonyms: DAF-4M, Diaminorhodamine-4M
MF: C₂₅H₂₆N₄O₃
FW: 430.5
Purity: ≥95%
Abs./Em.: 554/572 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

DAR-4M is supplied as a solid. A stock solution may be made by dissolving the DAR-4M in the solvent of choice, which should be purged with an inert gas. DAR-4M is soluble in DMSO.

Description

DAR-4M is a rhodamine-based photostable fluorescent probe for the detection of nitric oxide (NO).¹ The fluorescence intensity of DAR-4M increases with increasing NO concentration, however, the fluorescent yield can be increased further in the presence of both NO and other reactive nitrogen species (RNS), but not in the presence of non-NO RNS alone.^{1,2} Upon oxidation, DAR-4M is converted to the triazole, DAR-4M T, which displays absorption/emission maxima of 554 and 572 nm, respectively.^{1,2}

References

1. Kojima, H., Hirotsani, M., Nakatsubo, N., *et al.* Bioimaging of nitric oxide with fluorescent indicators based on the rhodamine chromophore. *Anal. Chem.* **73(9)**, 1967-1973 (2001).
2. Lacza, Z., Horváth, E.M., Pankotai, E., *et al.* The novel red-fluorescent probe DAR-4M measures reactive nitrogen species rather than NO. *J. Pharmacol. Toxicol. Methods* **52(3)**, 335-340 (2005).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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