PRODUCT DATA SHEET

Product: DAR-4M AM (cell permeable)

Cat. No.: **BC-039 (1 mg)**

Chemical Name:
Diaminorhodamine-4M acetoxymethyl ester

Formula:
$C_{28}H_{31}IN_4O_5$

Molecular Weight:
630.5

Description:
DAR-4M AM is a reagent used for the fluorescent detection of nitric oxide (NO). It is cell permeable and can be used to detect NO directly in cell specimens prepared from various sources, such as the brain. (Ex: ~560 nm; EM: ~ 575 nm)

Purity:
≥98% by HPLC

Solubility:
Soluble in DMSO

Protocol:
The reagent is supplied at a concentration of ~5mM. Prepare a 500-fold dilution in phosphate buffer (0.1 M phosphate, pH 7.4) at time of use (Note: The dilution buffer and working concentration should be determined according to the desired application). To avoid moisture absorption allow vial to reach room temperature before opening. The detection limit is about 7 nM.

Assay (wavelength): Excitation max. 560 nm, emission max. 575 nm.

Format:
1 mg in 0.32 mL DMSO

Storage and Stability:
Keep cool and dry at +4℃. Protect from light. Stable in a pH range of 4-12. Low decrease in fluorescence intensity over time.

The material has an acetoxymethylester group which is susceptible to hydrolysis. After opening aliquot into portions according to the required amount for each assay. Store the aliquots at +4℃ (desiccated). Protect from light. Do not freeze / thaw.

Caution / Handling:
Protect from light. To avoid moisture absorption allow vial to reach RT before opening.

Prepare reagent just before use. Use immediately after dilution and do NOT store this solution for later use.

Bovine serum albumin (BSA), phenol red and amines may affect the fluorescence and thus should be used with caution.

Do not take internally. Wear gloves and mask when handling this product. Avoid contact by all modes of exposure.

If you are not fully trained or are unaware of the hazards involved, do not use these compounds.

Limitations:
For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:
No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.