# PRODUCT INFORMATION



## Rhod-5N AM

Item No. 20442

Formal Name: N-(9-(4-(bis(2-(acetoxymethoxy)-

> 2-oxoethyl)amino)-3-(2-(2-(bis(2-(acetoxymethoxy)-2-oxoethyl)amino)-5-nitrophenoxy)ethoxy)phenyl)-6-(dimethylamino)-3H-xanthen-3-ylidene)-

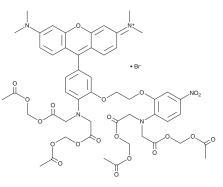
N-methylmethanaminium bromide

Synonym: Rhod-5N Acetoxymethyl ester MF:  $C_{51}H_{56}N_5O_{11} \bullet Br$ 

FW: 1,154.9 **Purity:** ≥90% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Special Conditions: Protect from light

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



### **Laboratory Procedures**

Rhod-5N AM is supplied as a solid. A stock solution may be made by dissolving the rhod-5N AM in the solvent of choice, which should be purged with an inert gas. Rhod-5N AM is soluble in DMSO. We do not recommend storing the aqueous solution for more than one day.

#### Description

Rhod-5N AM is a cell-permeant acetoxymethyl ester of the fluorescent calcium indicator rhod-5N (Item No. 20441). As rhod-5N AM enters cells, it is hydrolyzed by intracellular esterases to produce rhod-5N. Rhod-5N displays a low affinity for calcium ( $K_d = 19 \mu M$ ).<sup>1</sup> Low affinity calcium indicators are particularly useful for studying compartments with high concentrations of calcium, such as endoplasmic reticulum, where high affinity dyes will be insensitive to luminal fluctuations. Rhod-5N has excitation/emission maxima of approximately 551 and 576 nm, respectively.

#### Reference

1. Paredes, R. M., Etzler, J. C., Watts, L. T., et al. Chemical calcium indicators. Methods 46(3), 143-151 (2008).

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

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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