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Produktinformation

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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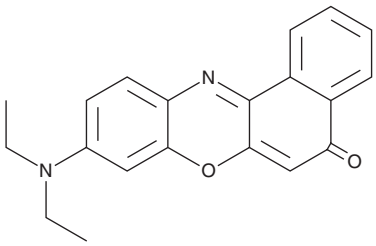
PRODUCT INFORMATION

Nile Red

Item No. 30787

CAS Registry No.:	7385-67-3
Formal Name:	9-(diethylamino)-5H-benzo[a]phenoxazin-5-one
MF:	$C_{20}H_{18}N_2O_2$
FW:	318.4
Purity:	≥95%
Ex./Em. Max:	529/576 nm, respectively, for neutral lipids
UV/Vis.:	λ_{max}: 265, 553 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

Nile red is supplied as a crystalline solid. A stock solution may be made by dissolving the nile red in the solvent of choice, which should be purged with an inert gas. Nile red is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of nile red in these solvents is approximately 1 mg/ml. Nile red is also slightly soluble in ethanol.

Nile red is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, nile red should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Nile red has a solubility of approximately 0.09 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Nile red is a fluorescent probe commonly used for the detection of intracellular lipid droplets.[1] It displays excitation/emission maxima of 529/576 nm, respectively, for neutral lipids.[2] It is selective for neutral lipids at emission wavelengths of 580 nm or lower, but, at higher emission wavelengths, phospholipid membranes are also visualized. Nile red has been used in live, fixed, or unfixed cells with detection by fluorescence microscopy, spectroscopy, or flow cytometry.[1,3] It has been used as a marker of lipid droplets in cellular models of hepatocyte steatosis.[4,5]

References

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4. Zheng, L., Lv, G.-C., Sheng, J., *et al.* Effect of miRNA-10b in regulating cellular steatosis level by targeting PPAR-α expression, a novel mechanism for the pathogenesis of NAFLD. *J. Gastroenterol. Hepatol.* **25(1)**, 156-163 (2010).
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