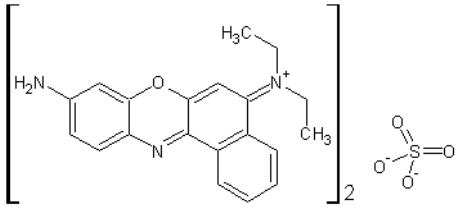
FT-IT2021

Nile stains

Products Description

Name :	**Nile Blue A**
	7-diethylamino-3,4-benzophenoxazine-2-one
Catalog Number :	FP-IT2021, 100mg
Molecular Weight :	MW= 353.8 ; CAS: [3625-57-8]
Solubility:	Soluble in DMSO
Fluorescence:	$\lambda_{exc}\backslash\lambda_{em}$ (...) = 633 / 672nm

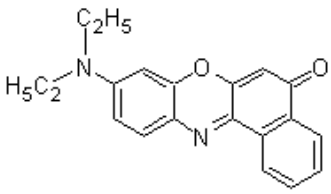


Nile blue (or Nile blue A) is a stain used in biology and histology. It may be used with live or fixed cells, and imparts a blue colour to cell nuclei.

It may also be used in conjunction with fluorescence microscopy to stain for the presence of polyhydroxybutyrate granules in prokaryotic or eukaryotic cells. Boiling a solution of Nile blue with sulfuric acid produces Nile red (Nile blue oxazone).

Our Nile Blue A stain *Fluorescence reference standard* is certified for use in Lillie and Fullmer method for staining and discriminating between melanins and lipofuscins in paraffin sections of animal tissue; Lillie and Fuller method for fatty acids/lipids using frozen sections of fatty liver and avocado.

Name :	**Nile Red**
Catalog Number :	FP-46875A, 25mg
Molecular Weight :	MW= 318.37 ; CAS: [7385-67-3]
Solubility:	Soluble in DMSO
Fluorescence:	$\lambda_{exc}\backslash\lambda_{em}$ (...) = 450-500 / 528nm (and 515-560 / >590nm, weaker)



Nile red (also known as Nile blue oxazone) is a lipophilic stain. It has also environment-sensitive fluorescence. It is strongly fluorescent, but only in a hydrophobic environment: it is intensely fluorescent in a lipid-rich environment while it has minimal fluorescence in aqueous media.
Nile red is an excellent vital stain for the detection of intracellular lipid droplets by fluorescence microscopy and flow cytofluorometry, staining them red. Better selectivity for cytoplasmic lipid droplets can be obtained when the cells are viewed for yellow-gold fluorescence (450-500 nm excitation; >528 nm emission) rather than red fluorescence (515-560 nm excitation; >590 nm emission).
Nile Red is also used in electrophoresis.

Storage: Store –20°C , protected from light

Directions for use

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