



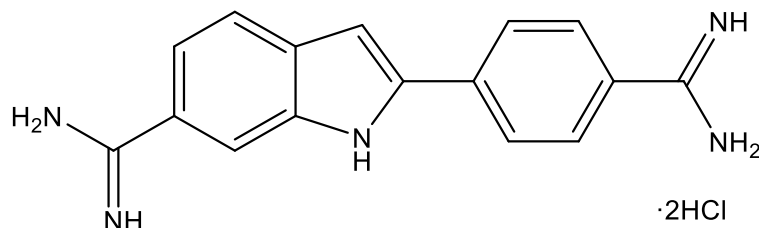
Catalog # 10-5065

DAPI

CAS# 28718-90-3

4',6-Diamidino-2-phenylindole, dihydrochloride; 2-[4-(aminoiminomethyl)phenyl]-1H-indole-6-carboximidamide, dihydrochloride

Lot # X105140



Fluorescent DNA stain for use on fixed cells for applications such as imaging, mitochondrial DNA detection¹, or nuclear quantitation². This dye, often used as a counterstain in immunofluorescence, binds strongly to AT rich runs of nucleic acid, causing its fluorescent emission to increase.³ Ex 358 nm; Em 461 nm (dsDNA), Em 500 (RNA).

- 1) Russell *et al.* (1975), *A simple cytochemical technique for demonstration of DNA in cells infected with mycoplasmas and viruses*; *Nature*, **253** 461
- 2) Tarnowski *et al.* (1991), *DAPI as a useful stain for nuclear quantitation*; *Biotech Histochem.*, **66** 297
- 3) Estandarte *et al.* (2016), *The use of DAPI fluorescence lifetime imaging for investigating chromatin condensation in human chromosomes*; *Sci. Rep.*, **6** 31417

PHYSICAL DATA

Molecular Weight: 350.25
Molecular Formula: C₁₆H₁₅N₅ · 2HCl
Purity: 98% by HPLC/TLC
NMR: (Conforms)
Solubility: DMSO (up to 35 mg/ml) or Water (up to 20 mg/ml with warming)
Physical Description: Yellow solid
Storage and Stability: PROTECT FROM LIGHT!!
Store as supplied desiccated at -20°C for up to 2 years from the date of purchase.
Solutions in DMSO may be aliquoted and stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.