

4',6-Diamidine-2'-phenylindole dihydrochloride (DAPI)

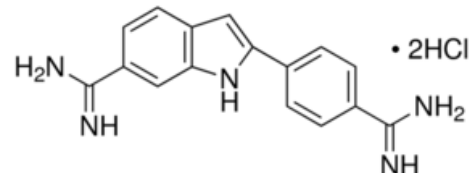
Technical literature is available at: www.mesgenbio.com. E-mail MesGen Technical Services if you have questions on use of this system: tech@mesgenbio.com

MESGEN
INNOVATION BIOTECHNOLOGY

Catalog Number : MG1893

Packaging Size : 10mg

Lot Number : Refer to vial



Synonym :

2-(4-Amidinophenyl)-6-indolecarbamidine dihydrochloride 4',6-Diamidino-2-phenylindole dihydrochloride DAPI dihydrochloride

CAS : 28718-90-3

Purity ≥ 97.0%

Molecular Weight : 350.24

Molecular Formula : C₁₆H₁₅N₅•2HCl

Solubility in water : 25 mg/ml

Absorbance maximum in aqueous solution λ=340 nm

Emission maximum in aqueous solution λ=488 nm

Application

A cell-permeable DNA-binding dye preferential to adenine and thymine rich DNA.

Description

DAPI is a cell-permeable DNA-binding dye which binds preferentially to DNA rich in adenine and thymine. It is used in flow cytometry for measuring nuclear DNA content or for sorting isolated chromosomes and is also useful for microscopic detection of nuclei and nuclear DNA in normal and apoptotic cells. DAPI can also be used to detect mycoplasma and in simple retrograde double-labelling procedures for studying axonal branching employing Evans Blue and Primulin. DAPI is a reversible inhibitor of S-adenosyl-L-methionine decarboxylase and KAO (diamine oxidase).

Preparation of stock solution

Dissolve in double dist. water to a final concentration of 1–5 mg/ml.

Preparation of working solution

Dilute the stock solution with methanol to a final concentration of 1 µg/ml. The working solution is stable at +2 to +8°C, for about 6 months.

Storage condition

-20° C

For Research Use Only. Not For Use In Diagnostic Procedures.