

DAPI

2th Edition (Revised in Mar. 2024)

Product Information

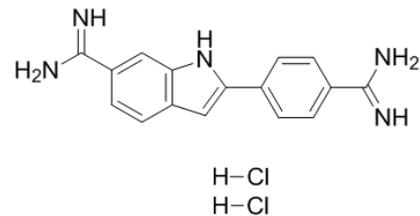
Chemical Name: 4',6-Diamidino-2-phenylindole

dihydrochloride

CAS: 28718-90-3

M.W: 350.25

Formula: C₁₆H₁₅N₅ · 2HCl



Fluorescence: maximum excitation wavelength λ_{ex}

340 nm; maximum emission wavelength λ_{em} 488 nm (nur DAPI); maximum

excitation wavelength λ_{ex} 364 nm after combination of DAPI and double-stranded

DNA; maximum emission wavelength λ_{em} 454 nm (DAPI-DNA-Komplex)

Purity: $\geq 98\%$

Solubility: H₂O: 10 mg/mL heat or sonication may be required.

Appearance: Yellow powder

Synonym : 4,6-Diamidino-2-phenylindole dihydrochloride ; 2-(4-Amidinophenyl)-6-

indolecarbamide dihydrochloride ; DAPI dihydrochloride

Description

DAPI is a fluorescent probe which is commonly used to stain DNA and chromosomes for fluorescent microscopy and flow cytometry applications. It forms a fluorescent complex by attaching in the minor groove of A-T rich sequences of DNA. DAPI is often used as a counterstain, as its ultraviolet (max 358 nm) excitation and blue (max 461 nm) emission wavelengths separate it nicely from many popular primary fluorophores. It can be used on either fixed or live cells, although its low permeability in live cells demands that higher concentrations be used.

Storage Conditions

Store at -20°C and protected from light