

DAPI Staining Solution IHC Related Reagent

DAPI Staining Solution

CATALOG #
AAA45595

APPLICATIONS
Immunohistochemistry, Flow Cytometry, Functional Assay, Immunofluorescence

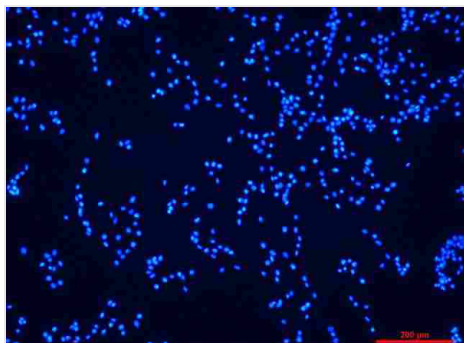
PRODUCT SYNONYMS

DAPI Staining Solution; DAPI Staining Solution ihc related reagent

PRODUCT SPECIFICATIONS

Form/Format	Liquid; 8 mM sodium phosphate, 2 mM potassium phosphate, 140 mM sodium chloride, 10mM potassium chloride; pH 7.4.
Concentration	1µg/ml (varies by lot)
Applicable Applications for DAPI Staining Solution ihc related reagent	IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), IF (Immunofluorescence)
Material	DAPI dihydrochloride
Stability	When stored as directed, product should be stable for one year.
Molecular formula	C ₁₆ H ₁₅ N ₅ - 2 HCL
Excitation: DAPI	340 nm
Emission: DAPI	488nm
Excitation: DAPI-DNA complexes	360nm
Emission: DAPI-DNA omplexes	460nm
Preparation and Storage	Store at -20°C, protect from light.

IMAGES



Application Data

NIH-3T3 cells were grown in 96 well plates, fixed with paraformaldehyde and permeabilized. Then incubate with DAPI solution for 5 minutes.

ADDITIONAL INFORMATION

Related Product Information for DAPI Staining Solution ihc related reagent	DAPI (4',6-diamidino-2-phenylindole) is a fluorescent dye which can bind DNA strands robustly, the fluorescence being detected by fluorescence microscope. DAPI can dye both live and fixed cells as it can cross intact membrane, with higher efficiency in fixed cells. The molecular formula is C16H15N5·2HCl with 350.25 g/mol molecular weight, CAS Number 28718-90-3. DAPI could pass through the cell and nucleic membranes and bind the double-strand DNA in the nucleus, producing 20 times stronger fluorescence than itself. The efficiency detected by fluorescence microscope is very high (almost 100%), having no side effects for the live cells. The sensitivity for double stranded DNA DAPI staining is many times larger comparing to ethidium bromide (EB). DAPI staining is usually used in cell death detection, as it enters more effectively and generates stronger fluorescence in dead cells. After staining with DAPI, detect with fluorescence microscope or flow cytometry. Blue fluorescent cell would be seen under the microscope after staining. The largest excitation wavelength for DAPI is 340nm (ultraviolet), and the largest emission wavelength is 488nm (blue). When DAPI binds with double-strand DNA, the largest excitation wavelength is 360nm, while the largest emission wavelength becomes 460nm. DAPI's blue emission makes it suitable for combined assays where the fluorescence ranges of DAPI and other IHC-employed fluorescent molecules like green-fluorescent fluorescein and GFP, or red- fluorescent stains like Texas Red, are completely distinctive.
Product Categories/Family for DAPI Staining Solution ihc related reagent	IHC Related Reagent

NCBI AND UNIPROT INFORMATION

Molecular Weight	350.3
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/ihc-related-reagent/dapi-staining-solution/45595>