

DATASHEET

DAPI Staining Solution (1mg/mL)

Product overview

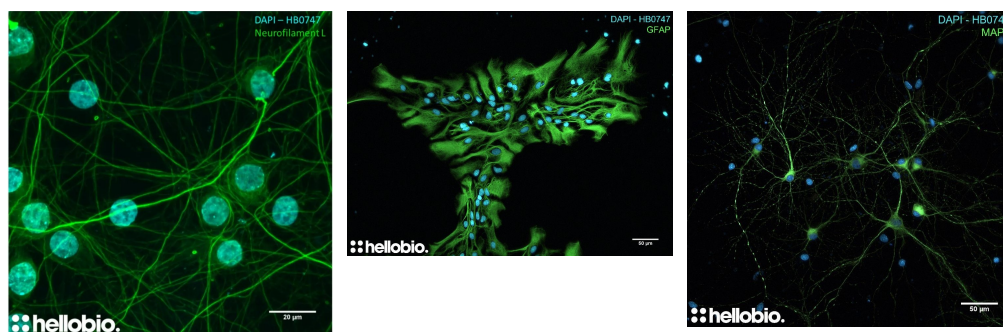
Name	DAPI Staining Solution (1mg/mL)
Cat No	HB8199
Biological description	Overview

DAPI is a blue fluorescent DNA stain which is cell permeant at high concentrations. This is a ready made 1mg/mL staining solution. It is recommended to dilute this solution 1:1000 with your desired buffer for a 1µg/mL working concentration. 0.1µg/mL-10µg/mL is the typical working concentration used in most applications.

DAPI also [available](#).

Description	Blue fluorescent DNA stain. Nuclear counterstain. 1mg/mL staining solution in water. Solid also available in 10mg and 50mg packs.
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Images



Biological Data

Application notes

Figure 1: Neurofilament L and DAPI co-staining in hippocampal cell culture.

DAPI is a DNA binding dye commonly used to label cell nuclei in immunofluorescence experiments. DAPI from Hello Bio labels cell nuclei (blue) at 1µg/ml when co-stained with an anti-neurofilament L antibody (green). For protocol see #Protocol 1 in application notes below.

Figure 2: GFAP and DAPI co-staining in hippocampal cell culture.

DAPI is a DNA binding dye commonly used to label cell nuclei in immunofluorescence experiments. DAPI from Hello Bio labels cell nuclei (blue) at 1µg/ml when co-stained with an anti-GFAP antibody (green). For protocol see #Protocol 1 in application notes below.

Figure 3: MAP2 and DAPI co-staining in hippocampal cell culture.

DAPI is a DNA binding dye commonly used to label cell nuclei in immunofluorescence experiments. DAPI from Hello Bio labels cell nuclei (blue) at 1 µg/ml when co-stained with an anti-MAP2 antibody (green). For protocol see #Protocol 1 in application notes below.

#Protocol 1: DAPI counterstaining of primary cultured neurones.

- Primary neurones were isolated and cultured from P2 rats and grown for three weeks before being fixed with 4% paraformaldehyde.
- Coverslips containing neuronal cell cultures were labelled for either MAP2, GFAP or Neurofilament L following standard immunohistochemical approaches.
- Coverslips were then submerged in 1 µg/ml DAPI diluted in PBS for 1 minute.
- Following 2 x 5-minute washes in PBS coverslips were mounted and imaged with a fluorescent microscope.

Solubility & Handling

Storage instructions Handling

-20 °C

Aliquot DAPI ready made solutions and store at -20 °C and avoid freeze thaw cycles. This compound is light sensitive; exposure to light may affect compound performance, we therefore recommend storing solutions in the dark and protecting from light.

Important

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

Chemical Data

Chemical name	4',6-Diamidino-2-phenylindole dihydrochloride
Molecular Formula	C ₁₆ H ₁₅ N ₅ ·2HCl
CAS Number	28718-90-3
Appearance	Pale yellow solution

References

DAPI: a DNA-specific fluorescent probe.

Kapuscinski J (1995) Biotech Histochem 70(5)

PubMedID [8580206](#)

DAPI as a useful stain for nuclear quantitation.

Tarnowski et al (1991) Biotech Histochem 66(6)

PubMedID [1725854](#)

DAPI: a DNA-specific fluorescent probe.

Kapuscinski et al (1995) Biotech Histochem 70(5)

PubMedID [8580206](#)
