

# DATASHEET

## DAPI Staining Solution (1mg/mL)

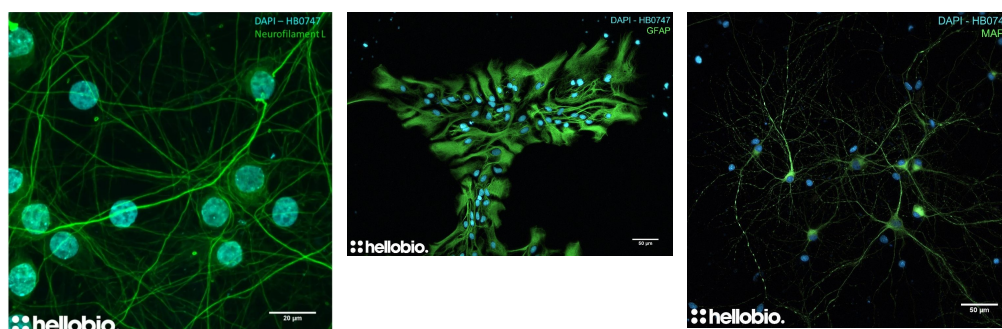
### Product overview

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

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.

<b>Description</b>	DAPI also <b>available</b> . Blue fluorescent DNA stain. Nuclear counterstain. 1mg/mL staining solution in water. Solid also <b>available</b> in 10mg and 50mg packs.
--------------------	--

### Images



### Biological Data

<b>Application notes</b>	<b><u>Figure 1: Neurofilament L and DAPI co-staining in hippocampal cell culture.</u></b>
--------------------------	---

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.

<b><u>Figure 2: GFAP and DAPI co-staining in hippocampal cell culture.</u></b>
--

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.

<b><u>Figure 3: MAP2 and DAPI co-staining in hippocampal cell culture.</u></b>
--

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

<b>Storage instructions</b>	-20 °C
<b>Handling</b>	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.
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

---

## Chemical Data

<b>Chemical name</b>	4',6-Diamidino-2-phenylindole dihydrochloride
<b>Molecular Formula</b>	C <sub>16</sub> H <sub>15</sub> N <sub>5</sub> ·2HCl
<b>CAS Number</b>	28718-90-3
<b>Appearance</b>	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](#)

---