

# **Hoechst 33342 staining solution**

## **Packing specification**

**Product Numbers:** HT33342-10、HT33342-50、HT33342-100

Specification: 10ml, 50ml, 100ml

Storage conditions: Store at -20 °C in the dark, valid for one year

CAS#: 23491-52-3

Nama:2' -(4-Hydroxyphenyl)-5-(4-methyl-1-piperazinyl)-2,5' -bi-1H-benzimidazole, trihydrochloride

Alias: Hoechst 33342, bisBenzimide H 33342, HOE 33342bisBenzimide H 33258 或 HOE 33258

Molecular formula: C27H28N6O · 3HCl

Molecular weight: 561.93 **product description:** 

Hoechst 33342 is a nuclear staining reagent that permeates cell membranes and stains DNA. It emits strong blue fluorescence after intercalating double-stranded DNA. Hoechst 33342 is commonly used in the detection of apoptosis, after staining, observation with a fluorescence microscope or flow cytometry. The excitation and emission wavelengths of Hoechst 33342-DNA are 350 nm and 460 nm, respectively.

Instructions:

#### 1. For fixed cells or tissues:

For cell or tissue samples, after fixation, wash the fixative appropriately. If subsequent immunofluorescence staining is required, immunofluorescence staining is performed first, and Hoechst 33342 staining is performed according to the subsequent steps after staining. If no other staining is required, the subsequent Hoechst 33342 staining is performed directly.

For adherent cells or tissue sections, add a small amount of Hoechst 33342 staining solution to cover the sample. For suspended cells, add at least 3 times the volume of the sample to be stained and mix well. Leave at room temperature for 3-5 minutes.

Aspirate Hoechst 33342 staining solution, wash with TBST, PBS or saline 2-3 times, 3-5 minutes each time. Observe directly under a fluorescence microscope or under a fluorescence microscope after mounting. When observing apoptosis, you can see that the nucleus of apoptotic cells is densely or densely stained.

#### 2. For living cells or tissues:

Add the appropriate amount of Hoechst 33342 staining solution to fully cover the sample to be stained. Usually, 1ml of staining solution needs to be added to one well of a six-well plate, and 100 microliters of staining solution needs to be added to one well of a 96-well plate.

Incubate at a temperature suitable for cell culture for 20-30 minutes. Discard the staining solution and wash it with PBS or culture medium 2-3 times to perform fluorescence detection.

### **Precautions:**

Hoechst 33258 is harmful to humans, please pay attention to proper protection.

Fluorescent dyes have the problem of quenching, it is recommended to complete the test as soon as possible after dyeing.

To slow down fluorescence quenching, anti-fluorescence quenching mounting solution can be used. Anti-fluorescence quenching mounting solution (P0126) can be ordered from Biyuntian.

For your safety and health, please wear laboratory clothes and disposable gloves

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For your safety and health, please wear lab coat and disposable gloves.

#### For scientific research use only.