

## Datasheet: 1351304

<b>Description:</b>	PUREBLU™ HOECHST 33342
<b>Name:</b>	PUREBLU™ HOECHST 33342
<b>Format:</b>	Reagent
<b>Product Type:</b>	Accessory Reagent
<b>Quantity:</b>	280 µg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/100
Immunofluorescence	▪			1/100

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

### Reconstitution

1. Add 500 µl of de-ionized water to one tube of lyophilized PureBlu Hoechst 33342 Dye, then vortex briefly to make the 100x stock solution (1.1 µg/ml [2 µM]).
2. Dilute the stock solution 1:100 with growth media (for live cells) or 1x phosphate buffered saline (for fixed cells) to make the 1x staining solution.

### Product Information

Hoechst 33342 is a cell-permeable fluorescent compound (MW 561.93) that is able to stain the DNA of eukaryotic and prokaryotic cells by binding with high affinity to the minor groove of AT-rich DNA sequences. When Hoechst 33342 is bound to DNA and excited by an ultraviolet light source, blue fluorescent emission can be detected with a maximum emission at 461 nm. PureBlu Hoescht 33342 has a characteristic Stokes shift of approximately 100 nm, which makes this dye an optimal choice when a good spectral separation is required. PureBlu Hoescht 33342 is compatible with fixed and unfixed cells. It exhibits high permeability for live cell membranes and is optimal for live cell DNA staining.

### Reagents In The Kit

5 vials, 56 µg each, Hoechst 33342 nuclear staining dye powder

### Instructions For Use

#### Staining of Live Cells

1. Grow cells of interest under conditions specific for the cell type.
2. Replace growth media with 1x staining solution (diluted in fresh growth media) and incubate at 37°C for 15 minutes.
3. Rinse cells with 1x phosphate buffered saline (prewarmed to 37°C).
4. Aspirate phosphate buffered saline and add fresh growth media to cells (prewarmed to 37°C).
5. Image cells.

### **Staining of Fixed Cells**

1. Grow cells of interest under conditions specific for the cell type.
2. Rinse cells with 1x phosphate buffered saline.
3. Fix cells with 4% formaldehyde at room temperature for 10 minutes.
4. Optional: Rinse cells with 1x phosphate buffered saline and permeabilize them with 0.1% Triton X-100 in 1x phosphate buffered saline at room temperature for 5 minutes.
5. Rinse cells with 1x phosphate buffered saline.
6. Stain with 1x staining solution (diluted with phosphate buffered saline) at room temperature for 15 minutes.
7. Rinse cells with 1x phosphate buffered saline.
8. Optional: Remove phosphate buffered saline and mount cells in antifade-mounting media.
9. Image cells.

Triton is trademark of Dow Chemical Company

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#### **Storage**

Prior to reconstitution store at -20°C  
 After reconstitution store at -20°C or +4°C  
 This product is photosensitive and should be protected from light. PureBlu™ Hoechst 33342 is stable for 12 months from date of reconstitution if stored at 20°C or 6 months at 4°C.

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#### **Guarantee**

Guaranteed until date of expiry. Please see product label.

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**Health And Safety  
Information**

Material Safety Datasheet documentation #1351304 available at:  
1351304: <https://www.bio-rad-antibodies.com/uploads/MSDS/1351304.pdf>

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**Regulatory**

For research purposes only

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