

Datasheet: 1351304

Description:	PUREBLU™ HOECHST 33342
Name:	PUREBLU™ HOECHST 33342
Format:	Reagent
Product Type:	Accessory Reagent
Quantity:	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 <u>www.bio-</u>							
	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 μ g/ml [2 μ M]).							
	2 Dilute the stock solution 1:100 with growth media (for live cells) or 1x phosphate							
	buffered saline (for fixed	cells) to ı	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, v	vhich mak	kes this dy	e an optimal choice wł	nen a good spectral			
	separation is required. P	ureBlu Ho	bescht 33	342 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, Hoe	chst 3334	2 nuclea	r 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% octylphenol ethoxylate 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.

 References
 1. Momchilova, A. *et al.* (2022) Effect of Quercetin and Fingolimod, Alone or in Combination, on the Sphingolipid Metabolism in HepG2 Cells. Int J Mol Sci. 23 (22): <u>13916.</u>
 2. Labrador-Garrido, A. *et al.* (2023) Live cell *in situ* lysosomal GCase activity correlates to alpha-synuclein levels in human differentiated neurons with LRRK2 and GBA1 mutations.

> Front Cell Neurosci. 17: 1229213.
> 3. Huang, M. & McEwan, A.W. (2024) Sensitive detection and propagation of brainderived tau assemblies in HEK293 based wild-type tau seeding assays <u>bioRxiv: 18 Jul.</u> [Epub ahead of print].

Storage									
		After reconsti	tution sto	ore at -20° C or $+4^{\circ}$ 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.							
Guarante	96	Guaranteed u	of expiry. Please see pr	oduct label.					
Health And Safety Material Safety Datasheet documentation #1351304 availab Information https://www.bio-rad-antibodies.com/SDS/1351304 1351304 1351304						e at:			
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Regulatory For research purpo		purpose	s only						
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America Fax: +1 919 87		3 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50			
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