


Specification

Bisbenzimidazole H33342 BioChemica

A0741

Physical Description:	Solid
Product Code:	A0741
Product Name:	Bisbenzimidazole H33342 BioChemica
Specifications:	Assay (HPLC): min. 98 %
Hazard pictograms	
WGK:	1
Storage:	2-8°C
Signal Word:	Attention
GHS Symbols:	GHS07
H Phrases:	H302 H315 H335
P Phrases:	P264 P301+P312 P330
Molecular Formula:	C ₂₇ H ₂₈ N ₆ O · 3HCl · 3H ₂ O
M:	615.99 g/mol
CAS:	23491-52-3
EINECS:	245-691-1
CS:	29339980

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Comment

Like H33258, the Hoechst stain H33342 is used for staining DNA. It binds to AT-rich sequences without intercalation (1). According to reference 2, both Hoechst dyes are not mutagenic at the concentrations employed. H33342 may be dissolved in cell culture medium (1, 2) or PBS / 25 % ethanol (1). Depending on the author, the working concentration ranges from 2 to 10 μ M or 1 μ g/ml, respectively. The dye is excited at 365 nm and the filter (emission) is 418 nm (1). The uptake of H33342 by cells is reduced by serum in the medium. In dye-free medium, cells become quickly destained. DAPI and H33258 only do stain vital CHO cells quantitatively, while H33342 stains different cell types (2).

Bibliography

(1)Arndt-Jovin, D.J. & Jovin, T.M. (1977) *J. Histochem. Cytochem.* **25**, 585-589 Analysis and sorting of living cells according to deoxyribonucleic acid content. (2)Lydon, M.J. et al. (1980) *J. Cell. Phys.* **102**, 175-181 Vital DNA staining and cell sorting by flow microfluorometry. (3)Lalande, M.E. et al. (1981) *Proc. Natl. Acad. Sci. USA* **78**, 363-367 H33342 dye uptake as a probe for membrane permeability changes in mammalian cells.

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