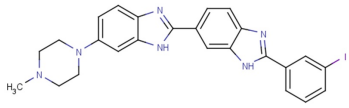
Data Sheet (Cat.No.T19026)

TargetMol
A DRUG SCREENING EXPERT

meta-iodoHoechst 33258

Chemical Properties



CAS No.:	158013-42-4
Formula:	C25H23IN6
Molecular Weight:	534.39
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Hoechst stains are part of a family of blue fluorescent dyes used to stain DNA.
Targets(IC_{50})	Others: None
In vitro	The dyes Hoechst 33258 and Hoechst 33342 are the ones most commonly used and they have similar excitation/emission spectra. Both dyes are excited by ultraviolet light at around 350 nm, and both emit blue/cyan fluorescent light around an emission maximum at 461 nm. Unbound dye has its maximum fluorescence emission in the 510-540 nm range. Hoechst dyes are soluble in water and in organic solvents such as dimethylformamide or dimethyl sulfoxide. Concentrations can be achieved of up to 10 mg/mL. Aqueous solutions are stable at 2-6 °C for at least six months when protected from light. For long-term storage, the solutions are instead frozen at ≤-20 °C. The dyes bind to the minor groove of double-stranded DNA with a preference for sequences rich in adenine and thymine. Although the dyes can bind to all nucleic acids, AT-rich double-stranded DNA strands enhance fluorescence considerably. Hoechst dyes are cell-permeable and can bind to DNA in live or fixed cells.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.871 mL	9.356 mL	18.713 mL
5 mM	0.374 mL	1.871 mL	3.743 mL
10 mM	0.187 mL	0.936 mL	1.871 mL
50 mM	0.037 mL	0.187 mL	0.374 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Portugal J, Waring MJ. Assignment of DNA binding sites for 4',6-diamidine-2-phenylindole and bisbenzimide (Hoechst 33258). A comparative footprinting study. Biochimica et Biophysica Acta 949 (2): 158-68.
2. Latt SA, Stetten G, Juergens LA, Recent developments in the detection of deoxyribonucleic acid synthesis by 33258 Hoechst fluorescence. The journal of histochemistry and cytochemistry : official journal of the Histochemistry Society 23 (7): 493-505.
3. a b c "Hoechst Stains". Invitrogren (Molecular Probes).

Tel:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481