



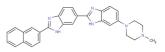
### Hoechst 33258 analog 5

# **Chemical Properties**

CAS No.: 23491-55-6 Formula: C29H26N6

Molecular Weight: 458.56 Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



# **Biological Description**

Description	Hoechst 33258 analog 5 is an analog of Hoechst stains which are part of a family of blue fluorescent dyes used to stain DNA.
Targets(IC <sub>50</sub> )	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. 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
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#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	2.181 mL	10.904 mL	21.807 mL
5 mM	0.436 mL	2.181 mL	4.361 mL
10 mM	0.218 mL	1.09 mL	2.181 mL
50 mM	0.044 mL	0.218 mL	0.436 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 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

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#### Reference

- 1. 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.

  2. a b c "Hoechst Stains". Invitrogren (Molecular Probes).
- 3. 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.

## Inhibitors · Natural Compounds · Compound Libraries

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