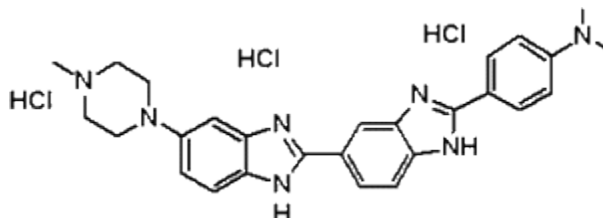


## Hoechst 33342 \*UltraPure grade\*

Ordering Information	Storage Conditions
Product Number: 17537 (5 mg), 17538 (20 mM, 100 µL)	Avoid light Keep at -20 °C and desiccated

### Chemical and Physical Properties



Molecular Weight: 560.95

Appearance: Light yellow powder

Solvent: Water

Spectral Properties: Excitation = 368 nm; Emission = 437 nm.

### Biological Applications

The Hoechst stains are a family of fluorescent stains for labeling DNA in fluorescence microscopy. Because these fluorescent stains label DNA, they are also commonly used to visualize nuclei and mitochondria. Hoechst 33342 can be excited by UV excitation, and emit blue fluorescence at ~440 nm. It is cell-permeable.

### Sample Protocol for Staining Cells

The following procedure can be adapted for most cell types. Growth medium, cell density, the presence of other cell types and other factors may influence staining. Residual detergent on glassware may also affect real or apparent staining of many organisms, causing brightly stained material to appear in solutions with or without cells present.

- Pellet cells by centrifugation and resuspend the cells in buffered salt solutions or media, with optimal dye binding at pH 7.4. Adherent cells in culture may be stained *in situ* on cover slips or in the cell culture wells.
- Add Hoechst stain using the concentrations between 0.5 and 5 µM and incubate it for 15 to 60 minutes. In initial experiments, it may be best to try several dye concentrations over the entire suggested range to determine the concentration that yields optimal staining.

**Disclaimer:** This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact our technical service representative for more information.