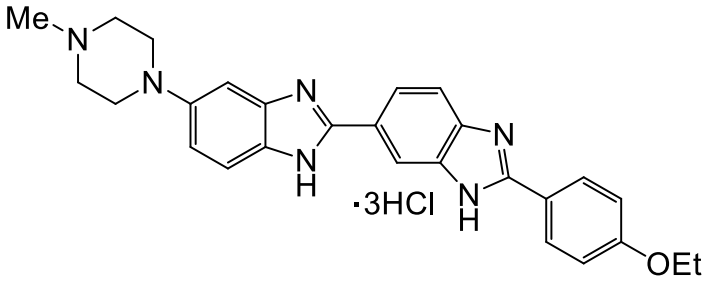
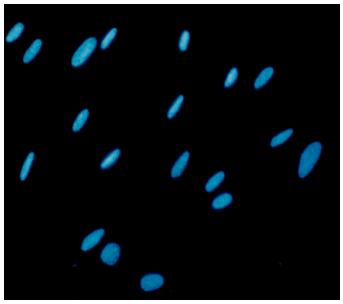
IS-7716 Hoechst 33342

Size: 100 mg





Description:

Chemical Name: Bisbenzimide, 2-(4-ethoxyphenyl)-5-(4-methyl-1-piperazinyl) -2,5-bi-1H-benzimidazole trihydrochloride

Appearance: Yellow green powder

MW: $C_{27}H_{31}Cl_3N_6O$=561.93

Storage Condition : 0-5°C, protect from light

Shipping Condition : Ambient temperature

Product Description

Hoechst dyes are cell membrane permeable and stain DNA to emit intense blue fluorescence. They bind to DNA in the minor groove of poly-AT sequence rich areas. Both Hoechst 33342 and Hoechst 33258 are water-soluble and stable in aqueous solutions. The excitation and emission wavelengths of Hoechst-DNA complex are 350 nm and 460 nm, respectively.

Staining Procedure

1. First prepare the stock HOECHST 33342 Dye solution: 1.9 mM Hoechst 33342 aqueous solution (1mg HOECHST 33342 Dye Powder in 1 ml dH_2O)
2. Prepare 10-50 µM Hoechst dye solution with PBS or an appropriate buffer to dilute the stock solution.
3. Add Hoechst dye solution with 1/10 of the volume of cell culture medium to the cell culture.
4. Incubate the cell at 37 °C for 10-20 min.
5. Wash cells twice with PBS or an appropriate buffer.
6. Observe the cells under a fluorescence microscope with 350 nm excitation and 460 nm emission filters.

a) Since Hoechst dyes may be carcinogenic, extreme care is necessary during handling.
b) Or you may replace the culture medium with 1/10 concentration of Hoechst dye buffer solution.

Safety warnings and precautions

Warning: ***For research use only.*** These example protocols utilize chemicals that may be hazardous, and should only be performed by appropriately qualified and well-trained persons.