



Product Name:

Hoechst-Cy5

Catalog Number:

T01212

Description:

Hoechst-Cy5 is a small-molecule DNA-specific fluorophore. It can be used as a fast, simple, and robust DNA stain for high-quality superresolution chromatin imaging on clinically processed tissue samples. In a comparative study of STORM(Stochastic optical reconstruction microscopy) imaging of genomic DNA using tissue section of mouse intestinal tissue prepared with standard clinical protocol, the images from Hoechst-Cy5 STORM showed the best-resolved DNA nanodomains when compared with TOTO-3 Iodide (TOTO-3), NucSpot Live 650 (Live-650), and Hoechst Janelia Fluor 646 (Hoechst-JF646). Hoechst-Cy5 significantly facilitates routine examination of superresolved chromatin structure from various pathological conditions directly on clinically processed tissue. Excitation maximum = 650 nm; emission maximum = 660 nm.

Physical and Chemical Properties:

Molecular Formula: C₆₇H₈₁N₁₀O₅

Molecular Weight: 1106.45 (free cation)

Physical Appearance: Dark blue solid

Purity: ≥95%

Optical Properties:

Abs/Em Maxima: 650/660nm.

Solubility:

DMSO, DMF.

Storage:

Store at -20°C and protected from light.

Shelf Life:

12 months after date of delivery.

References:

Xu, J., Sun, X., Kim, K., Brand, R. M., Hartman, D., Ma, H., Brand, R. E., Bai, M., & Liu, Y. (2022). Ultrastructural visualization of chromatin in cancer pathogenesis using a simple small-molecule fluorescent probe. In *Sci. Adv.* (Vol. 8). <https://www.science.org> DOI: 10.1126/sciadv.abm8293.

Caution:

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