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Proflavine Hemisulfate

National Cancer Institute

Source

National Cancer Institute. *Proflavine Hemisulfate*. NCI Thesaurus. Code C84109.

The hemisulfate salt form of proflavine, an acridine-derived fluorescent contrast and disinfectant agent that can potentially be used for cellular imaging and antiseptic purposes. Upon topical application of proflavine hemisulfate, proflavine diffuses into cells and intercalates into DNA, thereby accumulating in and staining the nucleus. During fluorescence imaging, the cell nuclei can be visualized. This allows nuclear morphometry and the identification of cancer cells. In addition, proflavine exerts its antibacterial effect by binding to bacterial DNA, thereby disrupting DNA synthesis and halting bacterial cell growth.