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Methyl-5-Aminolevulinate Hydrochloride Cream

National Cancer Institute

Source

National Cancer Institute. *Methyl-5-Aminolevulinate Hydrochloride Cream*. NCI Thesaurus. Code C2647.

A topical cream formulation containing the hydrochloride salt of methyl-5-aminolevulinate, a lipophilic methyl ester of 5-aminolevulinic acid, with photosensitizer prodrug activity. Upon topical administration, methyl-5-aminolevulinate in the cream is selectively absorbed by tumor cells where it is converted to the photosensitizer protoporphyrin IX (PpIX). Upon photoirradiation, PpIX is activated and transfers energy to oxygen, generating singlet oxygen and superoxide and hydroxyl radicals, which may result in free-radical-mediated DNA damage and cell death.