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Mafenide Acetate

National Cancer Institute

Source

National Cancer Institute. *Mafenide Acetate*. NCI Thesaurus. Code C47591.

The acetate salt form of mafenide, a synthetic sulfonamide analog of para-aminobenzoic acid (PABA) with topical anti-infective activity. Mafenide acetate competes with PABA for the bacterial enzyme dihydropteroate synthase, thereby preventing the incorporation of PABA into dihydrofolic acid, thereby interfering with normal folic acid metabolism. As a result, de novo synthesis of pyrimidines, which requires folate metabolites, is impeded and subsequently DNA synthesis is affected. Mafenide acetate is bacteriostatic against many gram-negative and gram-positive organisms, including *Pseudomonas aeruginosa* and certain strains of anaerobes.