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# Dapsone

National Cancer Institute

## Source

National Cancer Institute. *Dapsone*. NCI Thesaurus. Code C415.

A synthetic derivative of diamino-sulfone with anti-inflammatory and anti-bacterial properties. As a structural analog of p-aminobenzoic acid (PABA), dapsone inhibits dihydropteroate synthase (DHPS), an enzyme important in folate synthesis, resulting in a depletion of the folate pool and a reduction in the amount of thymidylate available for DNA synthesis. Although the exact mechanism through which dapsone exerts its anti-inflammatory activity has yet to be fully elucidated, this agent interferes with the activation and oxidative damage of myeloperoxidase in neutrophils and inhibits the integrin-mediated adherence and chemotaxis of neutrophils. Dapsone's anti-inflammatory activities may contribute to the effects seen upon topical administration.