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Mitoguazone Dihydrochloride

National Cancer Institute

Source

National Cancer Institute. *Mitoguazone Dihydrochloride*. NCI Thesaurus. Code C91409.

The hydrochloride salt of a guanyldihydrazone with potential antineoplastic activity. Mitoguazone competitively inhibits S-adenosyl-L-methionine decarboxylase (SAMDC), an enzyme involved in the synthesis of polyamines, resulting in decreased proliferation of tumor cells, antimitochondrial effects, and p53-independent apoptosis. Polyamines, specifically spermine and spermidine, are essential for thymidine kinase production, DNA synthesis, and cell proliferation.