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Sardomozide

National Cancer Institute

Source

National Cancer Institute. Sardomozide. NCI Thesaurus. Code C1673.

A methylglyoxal-bis(guanylhydrazone) (MGBG) derivative with potential antineoplastic and antiviral properties. Sardomozide selectively binds to and inhibits S-adenosylmethionine decarboxylase (SAMDC), an enzyme essential for the biosynthesis of polyamines, such as spermine and spermidine that bind to DNA and play critical roles in cell division, cell differentiation and membrane function. By inhibiting SAMDC, sardomozide reduces the intracellular polyamine concentration, thereby interfering with cell growth and differentiation. In addition, this agent also exhibits anti-HIV effect via suppressing expression of eukaryotic translation initiation factor 5A (eIF-5A), which is essential for retroviral replication.