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Cladribine

National Cancer Institute

Source

National Cancer Institute. *Cladribine*. NCI Thesaurus. Code C1336.

A purine nucleoside antimetabolite analogue. Cladribine triphosphate, a phosphorylated metabolite of cladribine, incorporates into DNA, resulting in single-strand breaks in DNA, depletion of nicotinamide adenine dinucleotide (NAD) and adenosine triphosphate (ATP), and apoptosis. Because this agent is resistant to adenosine deaminase, an enzyme that inactivates some antineoplastic agents, it is selectively toxic to lymphocytes and monocytes which exhibit little deoxynucleotide deaminase activity. (NCI04)