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Zebularine

National Cancer Institute

Source

National Cancer Institute. *Zebularine*. NCI Thesaurus. Code C37455.

A synthetic cytidine analogue and a cytidine deaminase inhibitor with anticancer activity. Following metabolic activation by phosphorylation and incorporation into DNA, zebularine inhibits DNA methyltransferase through covalent complex formation between the enzyme and zebularine-substituted DNA, hence resulting in non-specific, genome-wide induction of demethylation including the removal of aberrant methylation of promoter regions of genes critical for normal cellular functions.