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# Thioguanine Anhydrous

National Cancer Institute

## Source

National Cancer Institute. *Thioguanine Anhydrous*. NCI Thesaurus. Code C61970.

The anhydrous salt form of thioguanine, a synthetic guanosine analogue antimetabolite, with antineoplastic activity. Thioguanine is phosphorylated by hypoxanthine-guanine phosphoribosyltransferase to 6-thioguanilic acid (T GMP) and upon conversion to thioguanosine diphosphate (T GDP) and thioguanosine triphosphate (T GTP), this agent is incorporated into DNA and RNA, resulting in inhibition of DNA and RNA synthesis and cell death. This agent also inhibits glutamine-5-phosphoribosylpyrophosphate amidotransferase, thereby inhibiting purine ribonucleotide synthesis.