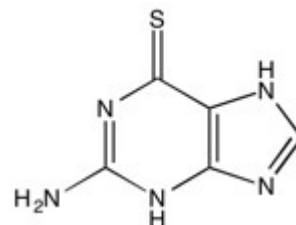


| Catalog       | Unit   |
|---------------|--------|
| TBI1282-100MG | 100 mg |
| TBI1282-1G    | 1 g    |

### Product Details

**Formal Name:** 2-Amino-6-mercaptapurine  
**Alternate Names:** 6-TG; NSC 752; NSC 76504  
**Molecular Formula:** C<sub>5</sub>H<sub>5</sub>N<sub>5</sub>S  
**Formula Weight:** 167.19  
**CAS Number:** 154-42-7  
**Purity:** >98%  
**Formulation:** powder  
**Solubility:** Soluble in DMF (up to 1.5 mg/ml with warming)  
**Storage:** -20°C  
**Stability:** ≥ 1 year.



### Applications

Anticancer agent; Downregulates DNMT1

### Functions

After incorporation into DNA, it disrupts cytosine methylation by DNA methyltransferases in vitro and acts as a DNA demethylating agent in vivo. It reactivates epigenetically silenced genes in acute lymphoblastic leukemia cells by facilitating proteasome-mediated degradation of DNA methyltransferase (DNMT1). Incorporates into DNA and induces double strand breaks which destabilize DNA structure resulting in cytotoxicity. Selectively kills BRCA2-defective tumors and overcomes PARP inhibitor resistance in a xenograft model. Anticancer and immunosuppressive activity.

### Application Procedures

First dissolved in DMF (up to 1.5 mg/ml with warming), then diluted to aqueous buffer. Solutions in DMF may be stored at -20°C for up to 1 month.

**For research use only.**