

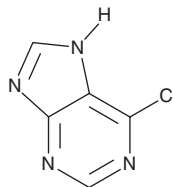
# PRODUCT INFORMATION



## 6-Chloropurine

Item No. 38879

**CAS Registry No.:** 87-42-3  
**Formal Name:** 6-chloro-9H-purine  
**Synonym:** NSC 744  
**MF:** C<sub>5</sub>H<sub>3</sub>ClN<sub>4</sub>  
**FW:** 154.6  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 265 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

6-Chloropurine is supplied as a solid. A stock solution may be made by dissolving the 6-chloropurine in the solvent of choice, which should be purged with an inert gas. 6-Chloropurine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 6-chloropurine in these solvents is approximately 10 mg/ml.

### Description

6-Chloropurine is a synthetic intermediate.<sup>1</sup> It has been used in the synthesis of antibacterial or kinase-inhibiting purines, as well as anticancer agents.<sup>1-3</sup> 6-Chloropurine (20 mg/kg per day), in combination with the glutamine amidotransferase inhibitor azaserine (Item No. 14834), increases survival time in an S180 mouse model of sarcoma.<sup>4</sup>

### References

1. Bakkestuen, A.K., Gundersen, L.-L., and Utenova, B.T. Synthesis, biological activity, and SAR of antimycobacterial 9-aryl-, 9-arylsulfonyl-, and 9-benzyl-6-(2-furyl)purines. *J. Med. Chem.* **48(7)**, 2710-2723 (2005).
2. Laufer, S.A., Domeyer, D.M., Scior, T.R.F., et al. Synthesis and biological testing of purine derivatives as potential ATP-competitive kinase inhibitors. *J. Med. Chem.* **48(3)**, 710-722 (2005).
3. Conejo-García, A., García-Rubiño, M.E., Marchal, J.A., et al. Synthesis and anticancer activity of (RS)-9-(2,3-dihydro-1,4-benzoxaheteroin-2-ylmethyl)-9H-purines. *Eur. J. Med. Chem.* **46(9)**, 3795-3801 (2011).
4. Sartorelli, A.C., and Booth, B.A. Comparative studies on the *in vivo* action of 6-chloropurine, 6-chloropurine ribonucleoside, and 6-chloro-9-ethylpurine on sarcoma 180 ascites cells. *J. Pharmacol. Exp. Ther.* **134**, 123-128 (1961).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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