



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

6-Thioguanine Cell Culture Tested

Product Number **A 4660**
Store at Room Temperature

Product Description

Molecular Formula: $C_5H_5N_5S$

Molecular Weight: 167.2

CAS Number: 154-42-7

λ_{max} : 347, 258¹

Extinction coefficient: $E^{mM} = 20.9, 8.1$ (0.1 M HCl)

Synonym: 2-amino-6-mercaptopurine

This product is routinely used in cell culture. One vial (2.5 mg) is reconstituted with 10 ml of sterile cell culture medium to form a 50X stock solution. When reconstituted in this manner, the product concentration is 1.5 mM. This stock solution can then be diluted into a final volume of 500 ml for use in cell culture. This will give the recommended working concentration of 30 μ M.

This product is γ -irradiated.

This product is a purine analog, which can be incorporated into DNA. Once incorporated, it will inhibit DNA synthesis and can be used to inhibit the growth of neoplasms.²

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in tissue culture medium [10 ml/vial (2.5 mg/10 ml)]. Vortexing and slight warming may be required. This product is also soluble in dilute alkali solution (1M NaOH, 50 mg/ml); very slightly soluble in ethanol; and insoluble in chloroform.

Storage/Stability

Solutions may be stored at 2-8 °C for at least one week.

References

1. J. Am. Chem. Soc., **77**, 1676 (1955).
2. Data for Biochemical Research, 3rd ed., Dawson, R. M. C., et al., Oxford University Press (New York, NY: 1986), p. 275.

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