

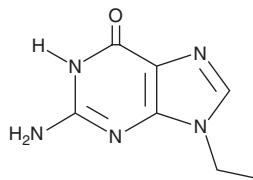
# PRODUCT INFORMATION



## 9-Ethylguanine

Item No. 18738

**CAS Registry No.:** 879-08-3  
**Formal Name:** 2-amino-9-ethyl-1,9-dihydro-6H-purin-6-one  
**Synonyms:** 6-Amino-9-ethyl-2-hydroxypurine, NSC 22755  
**MF:** C<sub>7</sub>H<sub>9</sub>N<sub>5</sub>O  
**FW:** 179.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 255 nm  
**Supplied as:** A crystalline 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

9-Ethylguanine is supplied as a crystalline solid. A stock solution may be made by dissolving the 9-ethylguanine in the solvent of choice, which should be purged with an inert gas. 9-Ethylguanine is soluble in 1 M NaOH at a concentration of approximately 9 mg/ml. It is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

### Description

9-Ethylguanine is a model nucleobase that is used to study DNA interactions with organometallic complexes, especially those designed to target tumors.<sup>1-4</sup>

### References

1. Lancelot, G. and Hélične, C. Phosphate-guanosine interactions. A model for the involvement of guanine derivatives in autocatalytic reactions of ribonucleic acids. *J. Biol. Chem.* **259**(24), 15046-15050 (1984).
2. Hanif, M., Meier, S.M., Nazarov, A.A., *et al.* Influence of the π-coordinated arene on the anticancer activity of ruthenium(II) carbohydrate organometallic complexes. *Front. Chem.* (2013).
3. Corral, E., Hotze, A.C.G., den Dulk, H., *et al.* Ruthenium polypyridyl complexes and their modes of interaction with DNA: Is there a correlation between these interactions and the antitumor activity of the compounds? *J. Biol. Inorg. Chem.* **14**(3), 439-448 (2009).
4. Millett, A.J., Habtemariam, A., Romero-Canelón, I., *et al.* Contrasting anticancer activity of half-sandwich iridium(III) complexes bearing functionally diverse 2-phenylpyridine ligands. *Organometallics* **34**(11), 2683-2694 (2016).

#### 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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