

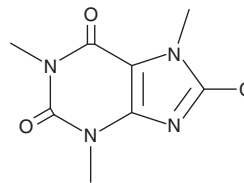
PRODUCT INFORMATION



8-chloro Caffeine

Item No. 35817

CAS Registry No.: 4921-49-7
Formal Name: 8-chloro-3,7-dihydro-1,3,7-trimethyl-1H-purine-2,6-dione
Synonym: NSC 6277
MF: C₈H₉ClN₄O₂
FW: 228.6
Purity: ≥98%
UV/Vis.: λ_{max}: 277 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

8-chloro Caffeine is supplied as a solid. A stock solution may be made by dissolving the 8-chloro caffeine in the solvent of choice, which should be purged with an inert gas. 8-chloro Caffeine is soluble in chloroform.

Description

8-chloro Caffeine is a derivative of the methylxanthine alkaloid caffeine (Item No. 14118). It binds to adenosine receptors (apparent $K_i = 30 \mu\text{M}$).¹ 8-chloro Caffeine (250 μM) potentiates UV-induced chromosomal aberrations in Cl-I Chinese hamster embryonic lung cells.² It has also been used in the synthesis of mixed lineage kinase domain-like protein (MLKL) inhibitors with necroptosis-inhibiting activity.³

References

1. Bruns, R.F. Adenosine antagonism by purines, pteridines and benzopteridines in human fibroblasts. *Biochem. Pharmacol.* **30(4)**, 325-333 (1981).
2. Nilsson, K. and Lehmann, A.R. The effect of methylated oxypurines on the size of newly-synthesized DNA and on the production of chromosome aberrations after UV irradiation in Chinese hamster cells. *Mutat. Res.* **30(2)**, 255-266 (1975).
3. Yan, B., Liu, L., Huang, S., et al. Discovery of a new class of highly potent necroptosis inhibitors targeting the mixed lineage kinase domain-like protein. *Chem. Commun. (Camb.)* **53(26)**, 3637-3640 (2017).

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.

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