

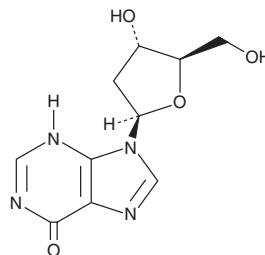
PRODUCT INFORMATION



2'-Deoxyinosine

Item No. 31507

CAS Registry No.: 890-38-0
MF: $C_{10}H_{12}N_4O_4$
FW: 252.2
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 246 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

2'-Deoxyinosine is supplied as a crystalline solid. A stock solution may be made by dissolving the 2'-deoxyinosine in the solvent of choice, which should be purged with an inert gas. 2'-Deoxyinosine is slightly soluble in DMSO and dimethyl formamide.

Description

2'-Deoxyinosine is the nucleoside form of hypoxanthine (Item No. 22254).¹ It is a product of DNA damage that is formed from 2'-deoxyadenosine (Item No. 27315) by adenosine deaminase or reactive nitrogen species (RNS).^{1,2} 2'-Deoxyinosine (1 mM) enhances apoptosis induced by 5-fluorouracil (5-FU; Item No. 14416) in HT-29 and SW620 cancer cells.³ It also enhances 5-FU-induced tumor growth suppression in an SW620 mouse xenograft model when administered at a dose of 1.6 g/kg twice per day.

References

1. Lim, K.S., Jenner, A., and Halliwell, B. Quantitative gas chromatography mass spectrometric analysis of 2'-deoxyinosine in tissue DNA. *Nat. Protoc.* **1(4)**, 1995-2002 (2006).
2. Dong, M., Wang, C., Deen, W.M., *et al.* Absence of 2'-deoxyxanosine and presence of abasic sites in DNA exposed to nitric oxide at controlled physiological concentrations. *Chem. Res. Toxicol.* **16(9)**, 1044-1055 (2003).
3. Ciccolini, J., Peillard, L., Evrard, A., *et al.* Enhanced antitumor activity of 5-fluorouracil in combination with 2'-deoxyinosine in human colorectal cell lines and human colon tumor xenografts. *Clin. Cancer Res.* **6(4)**, 1529-1535 (2000).

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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