

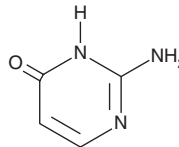
PRODUCT INFORMATION



Isocytosine

Item No. 38510

CAS Registry No.: 108-53-2
Formal Name: 2-amino-4(1H)-pyrimidinone
Synonyms: 2-Amino-4-hydroxypyrimidine, NSC 49118
MF: $C_4H_5N_3O$
FW: 111.1
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 223, 289 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

Isocytosine is supplied as a solid. A stock solution may be made by dissolving the isocytosine in the solvent of choice, which should be purged with an inert gas. Isocytosine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of isocytosine in these solvents is approximately 2 and 0.5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of isocytosine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of isocytosine in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Isocytosine is an isomer of the pyrimidine base cytosine (Item No. 36219).¹

Reference

1. Zhanpeisov, N.U. and Leszczynski, J. Specific solvation effects on the structures and properties of Watson-Crick and reverse Watson-Crick isocytosine-cytosine and guanine-cytosine base pairs: A theoretical ab initio study. *J. Mol. Struct. -THEOCHEM* **487(1-2)**, 107-115 (1999).

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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