PRODUCT INFORMATION



Purine

Item No. 30853

CAS Registry No.: 120-73-0 Formal Name: 9H-purine NSC 753 Synonym: MF: $C_5 H_4 N_4$ FW: 120.1 **Purity:** ≥95% λ_{max} : 264 nm A crystalline solid UV/Vis.: Supplied as: -20°C Storage: Stability: ≥4 years Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Purine is supplied as a crystalline solid. A stock solution may be made by dissolving the purine in the solvent of choice, which should be purged with an inert gas. Purine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of purine in these solvents is approximately 30 and 20 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 purine can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of purine in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Purine is an aromatic heterocyclic organic compound. It is biosynthesized from amino acids and bicarbonate.¹ Purine is the core structure of the nucleobases adenine (Item No. 18148) and guanine, the nucleosides adenosine (Item No. 21232) and guanosine (Item No. 27702), and the nucleotides, adenosine mono- (AMP; Item No. 21094), di- (ADP; Item No. 16778 | 21121), and triphosphate (ATP; Item No. 14498), and guanosine mono- (GMP; Item No. 16957), di-, and triphosphate (GTP; Item No. 16060).

Reference

1. Berg, J.M., Tymoczko, J.L., and Stryer, L. Biochemistry. 5th ed., W.H. Freeman, New York (2002).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY 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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