

Hydroxyurea

Catalog Number: 1270717

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: Hydroxycarbamide, N-Hydroxyurea, Hydrea, Oxyurea

Chemical Name: hydroxyurea Molecular Formula: CH₄N₂O₂ Molecular Weight: 76.1

CAS Number: 127-07-1

Purity: ≥95% **Applications:** FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.

Description

Hydroxyurea is a monohydroxyl-substituted urea antimetabolite that exhibits antineoplastic properties by the inhibition of DNA replication and cell proliferation. It inactivates ribonucleotide reductase and induces cell cycle arrest in S-phase. It is reported that hydroxyurea reduces leukocyte adhesion and inhibits the proliferation of human lung cancer cells.

Preparation & Storage

Soluble in organic solvents such as DMF. DMF up to 0.15 mg/ml.

References

- 1. Yarbro, J. W. (1992, June). Mechanism of action of hydroxyurea. In; Seminars in oncology; (Vol. 19, No. 3 Suppl 9, pp. 1-10).
- 2. Young, C. W., Hodas, S. (1964). Hydroxyurea: inhibitory effect on DNA metabolism.; Science,;146(3648), 1172-1174.
- 3. Elford, H. L. (1968). Effect of hydroxyurea on ribonucleotide reductase.