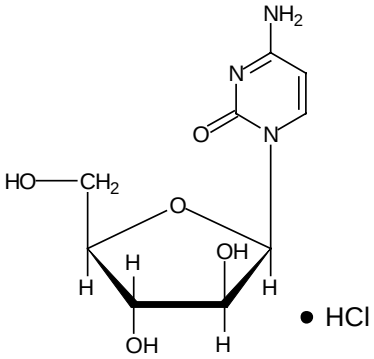
ProductInformation

CYTOSINE ß-D-ARABINOFURANOSIDE, Hydrochloride
Sigma Prod. No. C6645



CAS NUMBER: 69-74-9
SYNONYMS: AraC, Arabinosylcytosine, 1-ß-D-Arabinofuranosylcytosine, Cytabarine, Cytosine Arabinoside

PHYSICAL PROPERTIES:

Appearance: white powder
E^{mM}(280nm) = 13.3 (0.1 M HCl)
A_{250nm}/A_{260nm} = 0.43
A_{280nm}/A_{260nm} = 2.20
Molecular Formula: $C_9H_{13}N_3O_5 \bullet HCl$
Formula weight: 279.7
Purity: Approx. 99% by HPLC

PHYSICAL DESCRIPTION:

AraC is synthetically prepared and purified by recrystallization.

STABILITY / STORAGE AS SUPPLIED:

AraC is sensitive to light. It is recommended to store this product at 2-8°C and in dark. If stored as recommended, it will have a shelf-life of up to 4 years.

SOLUBILITY / SOLUTION STABILITY:

Sigma routinely tests the solubility of this product in water at a concentration of 50 mg/mL yielding a clear, colorless solution.

Solutions stored at -20°C and protected from light will be stable for up to one year. Solutions stored at room temperature in physiological buffer will be stable for 24 hours.[1]

USAGE / APPLICATIONS:

AraC is a selective inhibitor of DNA synthesis that does not affect RNA synthesis in mammalian cells.[2] It is used as an antineoplastic and antiviral agent.[1]

CYTOSINE ß-D-ARABINOFURANOSIDE, Hydrochloride
Sigma Prod. No. C6645

REFERENCES:

1. *Martindale: The Extra Pharmacopoeia*, 30th ed., 471-473 (1993).
2. *Data for Biochemical Research*, 3rd ed., 260-261 (1986).