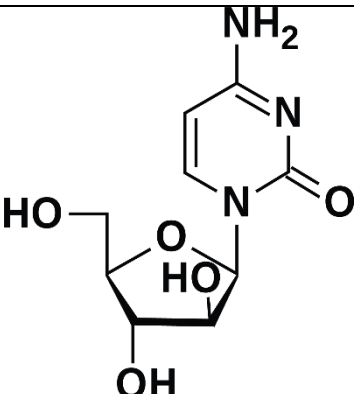


TrailBio® Cytarabine (Ara-C) User Instructions

Product Configurations

Catalog Number	Size	Quantity
TB47622	100 mg	1 vial

Product Description

Category	Specification
Product	Cytarabine (Ara-C)
Synonyms	Cytosine β-D-arabinofuranoside; Cytosine Arabinoside; Ara-C
CAS Number	147-94-4
MDL Number	MFCD00066487
Formula	C ₉ H ₁₃ N ₃ O ₅
Molecular Weight	243.22 g/mol
Storage (Solid)	-20 °C for up to 3 years or 4 °C for up to 2 years
Storage (Solution)	-80 °C for up to 2 years or -20 °C for up to 1 year
Shipping	Ambient temperature
Chemical Structure	

Quality & Analytical Specifications

Test Parameter	Specification
Solid Appearance (Color)	White to off-white
Purity	≥98%

Solubility

Solvent	Solubility	Notes
DMSO	≤17 mg/ml (71 mM)	may require sonication and warming

Solution Preparation Guide

Amount	1 mM	5 mM	10 mM
10 mg	41.115 ml	8.223 ml	4.112 ml
50 mg	205.575 ml	41.115 ml	20.558 ml
100 mg	411.150 ml	82.230 ml	41.115 ml

Biological Description

Cytarabine is a nucleoside analog that induces S-phase cell cycle arrest by DNA polymerase inhibition, which blocks DNA synthesis. It has also been reported to exhibit antiviral activity against HSV.

Associated Pathways & Applications

Category	Description
Associated Pathways	DNA/RNA synthesis; nucleoside analog; HSV; orthopoxvirus
Applications	Cell cycle/DNA damage; autophagy; anti-infection

IC₅₀ & Targets

Target	IC ₅₀
DNA Polymerase	16 nM

Notes

- When using DMSO-based stock solutions, maintain a final DMSO concentration of <0.5% in cell culture applications to minimize potential cellular toxicity, unless a higher concentration has been validated for the specific cell type.
 - Avoid repeated freeze-thaw cycles. Prepare single-use aliquots when possible.
 - Compound may collect on the vial cap or neck during shipping; centrifuge briefly before opening to bring contents to the bottom.
 - Certificate of Analysis (CoA) available upon request. Please contact support@trailbio.com.
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Also available from Trailhead Biosystems®

Cells

- TrailBio® Vascular Leptomeningeal Cells (Cat No. EC040003010)
- TrailBio® Hematopoietic Progenitor Cells (Cat No. ME060001020)
- TrailBio® Endothelial Cells (Cat No. ME010101021)

Small Molecules

- TrailBio® Y-27632 dihydrochloride (Cat No. TB 28056)
- TrailBio® Cytarabine (Ara-C) (Cat No. TB 47622)
- TrailBio® SB-431542 (Cat No. TB 46416)
- TrailBio® LDN-193189 dihydrochloride (Cat No. TB 86388)
- TrailBio® CHIR-99021 monohydrochloride (Cat No. TB 54925)

Services

- Custom iPSC Differentiation

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