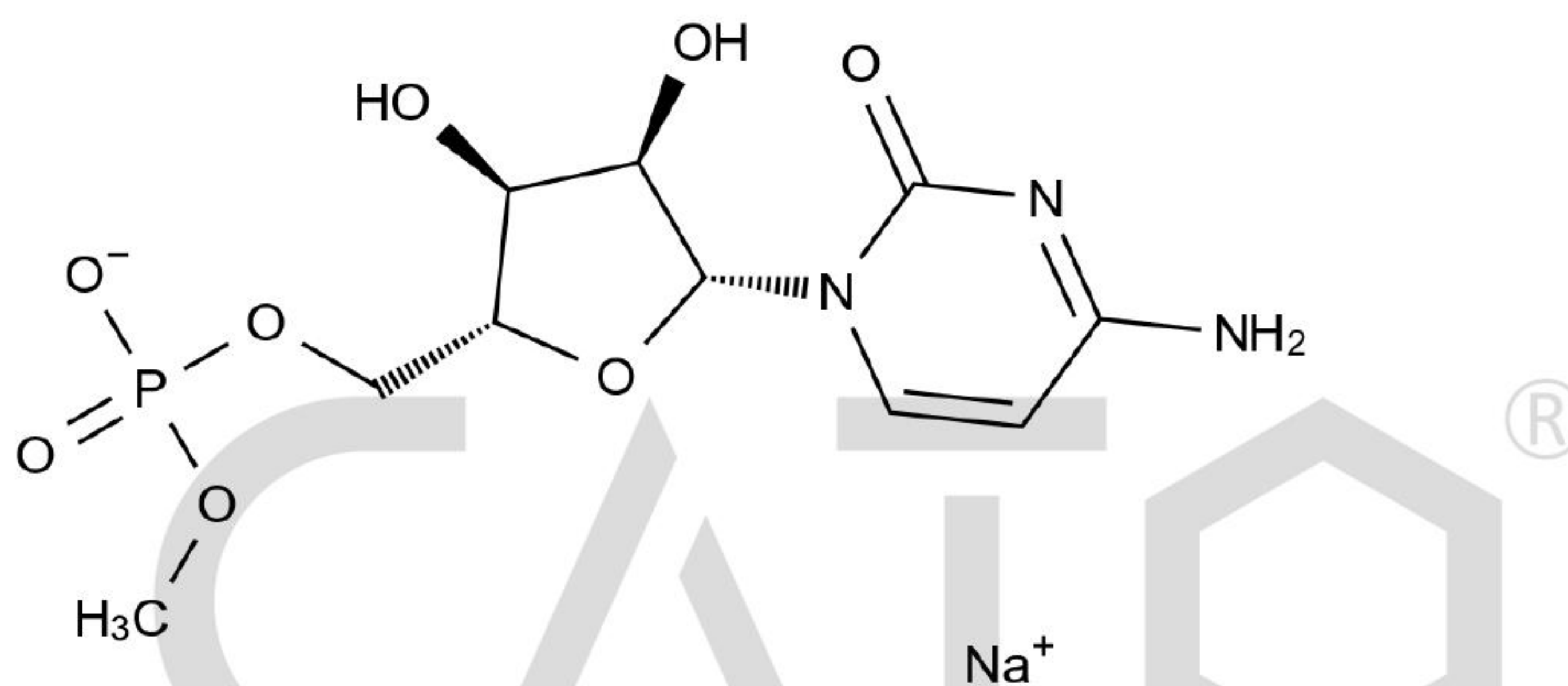


Certificate of Analysis

Reference Material & Standard

Product Name:	Citicoline Impurity 15	Catalogue Number:	C4X-220315
Synonyms:	N/A	Lot Number:	1128-RF-0062
CAS Number:	N/A	Expiry Date:	Jul 23, 2027
Molecular Formula:	C ₁₀ H ₁₅ N ₃ O ₈ P Na	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	336.22 22.99		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	HRMS&HNMR	Confirmed
Purity	HPLC	97.4648%
Loss On Drying	TGA	3.844%
Assay		93.7%

Comment:

The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Loss On Drying) * Purity HPLC (%) / 100%

Loss On Drying is considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Lily

Reviewed by:

Hinlam

Approved by General Manager:

David

Date: Dec 03, 2024

Date: Dec 03, 2024

Date: Dec 03, 2024

