CERTIFICATE OF ANALYSIS

ortho-TOPOLIN RIBOSIDE (oTR)
$C_{15}H_{21}N_5O_5$, MW = 373. 37

OLCHEMIM CODE: 001 013n
OLCHEMIM BATCH: oTR-C
MANUFACTURING DATE: April 2025
EXPIRATION DATE: April 2034
CAS: 50868-58-1
BATCH SIZE: 50 g

SYNTHESIS
Prepared by condensation of 6-chloropurine riboside and 2-hydroxybenzylamine in 1-propanol at presence of triethylamine. Re-crystallised from methanol. A white, microcrystalline solid, soluble in aqueous ethanol.

ANALYSIS
MELTING POINT: 181-182°C (Kofler block)
UV
Determined after drying to constant weight over phosphorus pentoxide in vacuo.

pH 7 (H_2O)	λ_{max} 270.3 nm (19,100)
pH 2 (0.1 M HCl)	λ_{max} 264.6 nm (19,200)
pH 11 (0.1 M NaOH)	λ_{max} 269.5 nm (18,500)
50% EtOH	λ_{max} 270.8 nm (19,400)

TLC (silica-chloroform/MeOH/conc. NH_4OH, 75/25/3, v/v/v); Rf 0.85. Purity 98+% at 25 µg loading. No contaminants detected, including 6-chloropurine riboside (Rf 0.45) or *ortho*-topolin detected.
MASS SPECTROMETRY: Matches the reference spectrum $[M+H]^+$= 374.1 amu, ZMD 2000 (Waters) single quadrupole electrospray MS.
HPLC: Samples were dissolved in mobile phase (initial conditions) and separated on RP-column (150 mm x 4.6 mm, 5µm) (Microsorb C18; Varian). The elution was performed with a methanolic gradient. The flow rate was 0.6 ml/min. The UV absorbance was scanned between 240 – 300 nm. Rt (oTR) = 18.5 min. Purity > 99+%.

STORAGE & STABILITY
Store over silica gel in tightly sealed container at 2-8°C. No detectable decomposition after 12 months storage under these conditions.

FOR LABORATORY USE BY EXPERIENCED PERSONNEL ONLY; NOT FOR DRUG, HOUSEHOLD OR OTHER USES

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