CERTIFICATE OF ANALYSIS

para-TOPOLIN RIBOSIDE (pTR)
$C_{17}H_{19}N_5O_5$, MW = 373. 37

OLCHEMIM CODE 001 046n
OLCHEMIM BATCH: pTR-B
MANUFACTURING DATE: November 2024
EXPIRATION DATE: November 2033
CAS: 23666-24-2
BATCH SIZE: 6 g

SYNTHESIS
Prepared by condensation of 6-chloropurine riboside and 4-hydroxybenzylamine in n-propanol, in the presence of triethylamine, under nitrogen. Re-crystallised from methanol. A white, crystalline solid, soluble in aqueous ethanol and methanol.

ANALYSIS
MELTING POINT: 189-192°C (Kofler block)
UV
Determined after drying to constant weight over phosphorus pentoxide in vacuo.

pH 7.2 (50 mM PBS, 0.15 NaCl)	λ_{max} 269.3 nm (17,900)
pH 2 (≅0.1 M HCl)	λ_{max} 276.5 nm (17,800)
pH 11 (≅0.1 M NaOH)	λ_{max} 275.8 nm (17,800)
50% EtOH	λ_{max} 269.4 nm (18,200)

TLC (silica-chloroform/MeOH/conc. NH_4OH, 70/30/3, v/v); Rf 0.40. Purity 98+% at 25 µg loading. No contaminants detected, including 6-chloropurine riboside (Rf 0.64) or *para*-topolin detected.
MASS SPETROMETRY: Matches the reference spectrum $[M+H]^+$= 374.0 amu, ZMD 2000 (Waters) single quadrupole electrospray MS.
HPLC: Samples were dissolved in mobile phase (initial conditions) and separated on RP-column (150 mm □ 2.1 mm, 5µm) (Symmetry C18; Waters). The elution was performed with a methanolic gradient. The flow rate was 0.25 ml/min. The UV absorbance was scanned between 240 – 300 nm. Rt (pTR) = 16.88 min, λ_{max} 269.4 nm. Purity > 98+%.

STORAGE & STABILITY
Store over silica gel in tightly sealed container at -18°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

OlChemIm s.r.o., Šlechtitelů 27, P.O.Box 22, 770 10 Olomouc, Czech Republic
Tel./Fax: +420 585 427 407
email:info@olchemim.cz, OlChemIm on the Internet: http://www.olchemim.cz