CERTIFICATE OF ANALYSIS

o-TOPOLIN-RIBOSIDE-5'-MONOPHOSPHATE
95+%, FW = 515.35 as disodium salt, monohydrate
FW = 453.35 as free acid
$C_{17}H_{18}N_5Na_2O_8P.H_2O$

OLCHEMIM CODE: 001 683n
OLCHEMIM BATCH: 683-B
MANUFACTURING DATE: July 2024
EXSPIRY DATE: July 2034
CAS: 1242061-01-3
BATCH SIZE: 97 mg

SYNTHESIS
Prepared by the condensation of 6-chloropurine-riboside-5'-monophosphate and 2-aminomethylphenol in methanol at presence of N,N-diisopropyl-N-ethylamine. Purified on silica-gel column and finally crystallized from ethanol. White, microcrystalline solid, soluble in water, methanol and aqueous ethanol. Dissolves readily in water at 10 mg/mL to give a clear, colourless solution.

ANALYSIS
Melting range: > 200°C; dec.
TLC (silica gel, Merck; 2-propanol – conc. NH_4OH - water (55 : 10 : 35; v/v), Rf 0.66.
No *o*-topolin riboside present.
HPLC: (Waters C_{18} 5 µm; 2.1x150 mm; pH = 4.0 (15 mM (ammonium formate); 2 to 90% methanol; initial: 2 % methanol, 10 minute isocratically; flow rate: 0.3 ml/min).
Rt (*o*-TMP) = 25.8 min. Purity 96.2 %.
ENZYMATIC HYDROLYSIS
o-TMP (1 mg) dissolved in glycine/NaOH buffer (1 ml, pH 10.4) containing alkaline phosphatase (7.5 units) in 0.1 ml buffer. Incubation for 2 h at 37 °C gives virtually complete (>98 %) removal of phosphate with formation of a compound which co-chromatographed in 15 % MeOH/chloroform with authentic *o*-TR. No 6-chloropurine riboside detectable; 6-chloropurine riboside 5'-monophosphate content < 0.5 %.
STORAGE & STABILITY
Potentially hygroscopic. Store in tightly sealed container at –18 °C. No detectable decomposition after 6 months storage under these conditions.

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

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