CERTIFICATE OF ANALYSIS

para-TOPOLIN-RIBOSIDE-5'-MONOPHOSPHATE
84+%, FW = 515.34 as disodium salt, monohydrate
$C_{17}H_{18}N_5Na_2O_8P.H_2O$, FW = 453.35 as free acid

OLCHEMIM CODE: 001 685n
OLCHEMIM BATCH: 685-A
MANUFACTURING DATE: July 2025
EXSPIRY DATE: July 2034
CAS: 1402800-77-4
BATCH SIZE: 50 mg

SYNTHESIS

Prepared by the condensation of 6-chloropurine-riboside-5'-monophosphate and 4-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 0.64.
No *p*-topolin riboside present.
HPLC: (Waters C_{18} 5 µm; 2.1x150 mm; pH = 4.0 (15 mM (ammonium formate); 2 to 90% MeOH; initial: 2 % MeOH, 10 minute isocratically; flow rate: 0.3 ml/min). Purity 84.0 %.

ENZYMATIC HYDROLYSIS

p-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 *p*TR. No 6-chloropurine riboside detectable; 6-chloropurine riboside 5'-monophosphate content < 0.5 %.

STORAGE & STABILITY

Potentially hygroscopic. Store in tightly sealed container at –20 °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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