CERTIFICATE OF ANALYSIS

ortho-TOPOLIN-9-GLUCOSIDE (oT9G)

[6-(2-hydroxybenzylamino)-9-β-D-glucopyranosylpurine]

FW = 403.40

OLCHEMIM CODE: 001 015n
OLCHEMIM BATCH: oT9G-C
MANUFACTURING DATE: February 2025
EXPIRATION DATE: February 2034
CAS: 160299-96-7
BATCH SIZE: 200 mg

SYNTHESIS

By nuclephilic substitution of 6-chloropurine-9-β-D-glucoside and 2-hydroxybenzylamine in triethylamine. Purified by column chromatography and re-crystallised from methanol-acetone. A white, microcrystalline solid, soluble in aqueous ethanol.

ANALYSIS
MELTING POINT: 150-155°C (Kofler block)

TLC (silica-chloroform/methanol, 2/1, v/v), Rf 0.50. No impurities detectable at 25 μg loading. Purity 95+%.
MASS SPECTROMETRY: Matches the reference spectrum $[M+H]^+$= 404.05 amu, ZMD 2000 (Waters) single quadrupole electrospray MS.
HPLC: Samples were dissolved in mobile phase (initial conditions) and separated on RP-column (150 mm × 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, λ_{max} 269.0 nm. Rt (oT9G) = 14.2 min. Purity > 96.5+%.
^{1}H NMR (DMSO + D_2O): 8.25 (*s*, 1H) and 8.17 (*s*, 1H) purinyl, 7.08 (*dd*, 1H, *J* 7.0, *J* 8.0, Ph-m), 6.68/6.51 (*m*, 3H, Ph), 5.39 (*d*, 1H, *J* 10, H-1´), 4.61 (*bs*, 2H, CH_2Ph), 4.20-3.30m.

STORAGE & STABILITY:
ACID LABILE! HYGROSCOPIC! Store over silica gel 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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