CERTIFICATE OF ANALYSIS

meta-TOPOLIN-9-GLUCOSIDE (mT9G)

[6-(3-hydroxybenzylamino)-9-β-D-glucopyranosylpurine]

FW = 403.40

OLCHEMIM CODE: 001 014n
MANUFACTURING DATE: April 2024
CAS: 179528-30-4

OLCHEMIM BATCH mT9G-B
EXPIRATION DATE: April 2034
BATCH SIZE: 200 MG

SYNTHESIS

By reaction of 6-chloropurine-9-β-D-glucoside and 3-hydroxybenzylamine. Purified by columns chromatography and re-crystallised from acetone – methanol mixture. A white, microcrystalline solid, soluble in aqueous ethanol.

ANALYSIS
MELTING POINT: 154-157°C (Kofler block)
UV: Determined after drying to constant weight over phosphorus pentoxide in vacuo.

pH 7 (H_2O)	λ_{max} 267.0 nm
pH 2 (≅0.1 M HCl)	λ_{max} 268.5 nm
pH 11 (≅0.1 M NaOH)	λ_{max} 269.5 nm

TLC (silica-chloroform/methanol, 2/1, v/v), Rf 0.50. No impurities detectable at 25 µg loading. Purity 98+%.
MASS SPETROMETRY: 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. Rt (mT9G) = 10.9 min. Purity > 99+%.
^{1}H NMR (DMSO + D_2O): 8.35 (*s*, 1H) and 8.21 (*s*, 1H) purinyl, 7.16/6.65 (*m*, 4H, Ph), 5.40 (*d*, 1H, *J* 9, H-1´), 4.61 (*bs*, 2H, CH_2Ph), 4.00-3.24m.
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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