CERTIFICATE OF ANALYSIS

cis-ZEATIN-7-β-D-GLUCOPYRANOSIDE

[(*Z*)-6-((4-hydroxy-3-methylbut-2-en-1-yl)amino)-purine-7-β-D-glucopyranoside]

$C_{16}H_{23}N_5O_6$, FW = 381.39

OLCHEMIM CODE: 001 785n
OLCHEMIM BATCH: B-785
MANUFACTURING DATE: July 2024
EXPIRATION DATE: July 2033
CAS: 823188-69-8
BATCH SIZE: 5 mg

SYNTHESIS

Cis-zeatin-7-β-D-glucopyranoside was prepared by the condensation of 6-chloropurine-7-β-D-glucoside-tetraacetate and (*Z*)-4-amino-2-methylbut-2-en-1-ol hemioxalate. 6-chloropurine-7-β-D-glucoside-tetraacetate was prepared by alkylation method of 6-chloropurine with acetobromo-α-D-glucose followed by chromatographic separation of 7-regioisomer. The crude product was purified on C18 reverse phase column 19 x 100 mm, 5 µm particles, gradient was formed from 10 mM aqueous ammonium acetate and acetonitrile, flow rate 15 mL/min. Fractions with the uniform product were lyophilized to get a beige solid product.

APPEARANCE

A beige, amorphous solid. CAUTION! VERY HYGROSCOPIC! Dissolves readily in aqueous alcohol at 5 mg/ml to give a clear, colourless solution.

ANALYSIS

UV (recorded from HPLC photodiode array detector): A_{max} 272 nm
HPLC-MS: (2.5 µm C18, 50 x 3.0 mm HPLC Column); MF: A, 0.01 M ammonium acetate in water / B, acetonitrile. At flow-rate 0.6 ml/min, the following binary gradient was used: 5% B 0-1 min; 5-60% B 1-4 min, 60-5% B 4-4.5 min. Product gives a single, symmetrical peak, Rf 2.34 min. Purity 96+%.
HRMS (HESI *m/z*): $[M+H]^+$ calcd for $C_{16}H_{24}N_5O_6$ 382.1721; found 382.1723.

STORAGE & STABILITY

ACID-LABILE! HYGROSCOPIC! Store over silica gel in tightly sealed container at - 20°C.

SAFETY

No toxicological data available for this compound. Treat as toxic and potentially mutagenic.

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

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