CERTIFICATE OF ANALYSIS

S-(-)-DIHYDROZEATIN (S-DZ)

(-)-6-(S)-(4-hydroxy-3-methylbutylamino)purine

$C_{10}H_{15}N_5O$, FW = 221.26

OLCHEMIM CODE: 028 060n
OLCHEMIM BATCH: 060S-A
MANUFACTURING DATE: August 2025
EXPIRATION DATE: August 2034
CAS: 14742-97-3
BATCH SIZE: 2.2 g

SYNTHESIS

Condensation of 6-chloropurine and (+)-4-amino-2-methylbutan-1-ol in n-BuOH containing triethylamine. Re-crystallised twice from EtOH/acetonitrile (1/2). A colourless, amorphous solid soluble in EtOH.

ANALYSIS
mp 154 – 155ºC (lit. 154 – 155ºC).
UV
Determined after drying to constant weight over phosphorus pentoxide in vacuo
EtOH Amax 267 nm (16,900)

TLC (silica-chloroform/MeOH. 90/10, v/v), Rf 0.30. Purity 98+% at 25 µg and 50 µg loading. No contaminants detected at either load including 6-chloropurine (Rf 0.65).
HPLC (150 x 4.5 mm ODS, 0 to 30% acetonitrile over 30 min, 2 ml/min), Rt 13.8 min. Purity 98+%.
SPECIFIC ROTATION: $[\alpha]_D^{25}$ = -8.0º (EtOH; c = 1.98)

STORAGE & STABILITY: ACID LABILE! HYGROSCOPIC!
Store over silica gel in tightly sealed container at –20ºC. No detectable decomposition after 6 months storage under these conditions.
NOTE: This vial contains approx. 10% more than the stated quantity. This is to ensure that you can dispense the required amount. However the product is unlikely to be anhydrous when it reaches you. For quantitative work, therefore, calculate concentration from UV absorption i.e. 1 OD at 270 nm in ethanol = 13.6 µg/ml.

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

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