CERTIFICATE OF ANALYSIS

RS (+/-)-*trans*-1´-METHYLZEATIN (t-1´-MZ)
$C_{11}H_{15}N_5O$, MW = 233.28

OLCHEMIM CODE: 001 791n
OLCHEMIM BATCH: 791-B
MANUFACTURING DATE: March 2026
EXPIRATION DATE: March 2035
CAS: 143168-20-1
BATCH SIZE: 150 mg

SYNTHESIS
Prepared by condensation of 6-chloropurine and (E)-4-amino-2-methylpent-2-en-1-ol oxalate in n-propanol at presence of triethylamine. Purified by crystallization from water and methanol. Almost white, crystalline solid, very slightly soluble in water (20 °C). Soluble in hot water (90 °C), aqueous ethanol or methanol.

ANALYSIS
MELTING POINT: 175 - 177 ^{o}C
UV
Determined after drying to constant weight over phosphorus pentoxide in vacuo.

pH 7 (H_2O)	λ_{max} 269.3 nm (17,900)
pH 2 (≅0.1 M HCl)	λ_{max} 276.5 nm (17,800)
pH 11 (≅0.1 M NaOH)	λ_{max} 275.8 nm (17,800)
50% EtOH	λ_{max} 269.4 nm (18,200)

TLC: (silica gel, Merck) chloroform-MeOH-conc. NH_4OH (4 : 1 : 0.1); Rf 0.63
^{1}H NMR: in accordance with published data.
MASS SPECTROMETRY: Matches the reference spectrum $[M+H]^+$= 234.24, ZMD 2000 (Waters) single quadrupole electrospray MS.
HPLC: RP 18, 2.1 x 150 mm, 5 μm (Waters); flow rate: 0.3 ml/min.; λ_{max} 269 nm
A: MeOH
B: 15 mM $HCOONH_4$ buffer (pH = 4)
Starting ratio: B/A = 10/90, final ratio (after 25 minute): 90/10
Rt 15.47 min; purity 98+%

STORAGE & STABILITY
Store in tightly sealed container at -20°C. No detectable decomposition after 12 months storage under these conditions.

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

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