CERTIFICATE OF ANALYSIS

trans-ZEATIN HYDROCHLORIDE, (Z.HCl)
$C_{10}H_{13}N_5O.HCl$, MW = 255.71

OLCHEMIM CODE: 001 510n
OLCHEMIM BATCH: 510-A
MANUFACTURING DATE: January 2024
EXPIRATION DATE: January 2036
CAS: 6025-81-6
BATCH SIZE: 30 g

APPEARANCE
Colourless plates/crystals to very pale-yellow solid, soluble in aqueous alcohol. Dissolves also easily in water at 20 mg/ml to give a clear, colourless solution.

ANALYSIS
MELTING POINT 162-164°C (Kofler block)
UV
Determined after drying to constant weight over phosphorus pentoxide in vacuo.

pH 7.2 (30 mM phosphate buffer)	λ_{max} 270 nm (17,500)
pH 2.0 (≅0.1 M HCl)	λ_{max} 275 nm (15,500)
pH 11.0 (≅0.1 M NaOH)	λ_{max} 276 nm (15,500)

TLC (silica-chloroform/MeOH. 9/1); Rf 0.30. Purity 98+% at 25 µg loading. No contaminants detected, including 6-chloropurine (Rf 0.45) or *cis*-zeatin (Rf 0.35) detected.
MASS SPETROMETRY: Matches the reference spectrum $[M]^+$= 220.07 amu, ZMD 2000 (Waters) single quadrupole electrospray MS.
HPLC (150 x 4.0 mm X-Terra column /Waters/; isocratic15% MeOH:85% buffer - pH 3.4 at 0.35 ml/min); Rt 12.7 min, purity 99+%, *cis*-isomer content < 0.1%.

STORAGE & STABILITY
Store over silica gel in tightly sealed container at below 0°C. No detectable decomposition after 12 months storage under these conditions.
NOTE: For quantitative work, therefore, calculate concentration from UV absorption i.e. 1 OD A 270 nm in buffer = 12.5 µg/ml.

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

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