CERTIFICATE OF ANALYSIS

N^6-(2-ISOPENTENYL)ADENOSINE (iPR)

6-(γ,γ-dimethylallylamino)purine riboside

$C_{15}H_{21}N_5O_4$, FW = 335.37

OLCHEMIM CODE: 001 017n
OLCHEMIM BATCH: E-1040C
MANUFACTURING DATE: May 2025
EXPIRATION DATE: May 2034
CAS: 7724-76-7
BATCH SIZE: 80 g

SYNTHESIS
Prepared by condensation of 6-chloropurine riboside and 3-methylbut-2-enyl amine hydrochloride in 1-propanol at presence of triethylamine. Re-crystallised from methanol.
A white, crystalline solid, soluble in methanol or ethanol.
Dissolves at 5 mg/ml in chloroform/methanol (1/1, v/v) to give a clear, colourless solution.

ANALYSIS
MELTING POINT: 148-150 °C.
UV: Determined after drying to constant weight over phosphorus pentoxide in vacuo.

EtOH, pH 1	λ_{max} 266 nm (19,100)
EtOH	λ_{max} 269 nm (18,120)
EtOH, pH 12	λ_{max} 270 nm (20,080)

TLC (silica-chloroform/MeOH, 95/5), a single, sharp spot at Rf 0.32. Purity 98+%. No detectable contam. at 50 µg and 100 µg loading, including 6-chloropurine riboside (Rf 0.16).

TLC (silica-ethyl acetate/methanol, 9/1, v/v). iPR gives a single, sharp spot (Rf 0.04) at 25 & 50 µg loading with no detectable contaminants. Purity 99+%.

MASS SPECTROMETRY: Matches the reference spectrum $[M+H]^+$= 336.2 amu, ZMD 2000 (Waters) single quadrupole electrospray MS.

HPLC: Samples were dissolved in mobile phase (initial conditions) and separated on RP-column (150 mm x 4.6 mm, 5µm) (Microsorb C18; Varian). The elution was performed with a methanolic gradient (10 mM HCOOH). The flow rate was 0.6 ml/min. The UV absorbance was scanned between 240 – 300 nm. Rt (iPR) = 19.8 min. Purity > 99+%.

STORAGE & STABILITY
Store over silica gel in tightly sealed container in freezer below 0 °C. Possibly light sensitive.

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

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