CERTIFICATE OF ANALYSIS

2-METHYLTHIO-N^6-ISOPENTENYLADENOSINE (2MeS-IPR)
MW = 381.46

OLCHEMIM CODE: 001 506n
OLCHEMIM BATCH: 506-A
MANUFACTURING DATE: April 2024
EXPIRATION DATE: April 2034
CAS: 20859-00-1
BATCH SIZE: 3.1 g

SYNTHESIS

By condensation of 2-methylthio-6-chloropurine riboside and 2-isopentenylamine hydrochloride. Chromatographically purified over silica and re-crystallised 2 times from ethanol. A white, microcrystalline solid, sparingly soluble in ethanol.

ANALYSIS

MELTING POINT: 195-196°C (Kofler block)

UV

Determined after drying to constant weight over phosphorus pentoxide in vacuo.

50% EtOH	λ_{max} 244 nm (25,300)	λ_{max} 283 nm (18,000)
EtOH/0.1 M HCl	λ_{max} 246 nm (18,600)	λ_{max} 286 nm (16,100)
EtOH/0.1 M NaOH	λ_{max} 243 nm (24,900)	λ_{max} 283 nm (18,000)

HPLC (30 to 80% acetonitrile, 1 ml/min, 30 min, 25 x 0.4 cm ODS, 270 nm), Rt: 2MeS-iPR 12.1 min. Product co-elutes with authentic compound in 1:1 mix. HPLC purity 98.6%, no contaminants visible (<1%), very sharp peak.

TLC: (chloroform/methanol, 9:1). Shows single UV spot on admixing with equal amount of authentic compound (Rf 0.59). No trace of 2-methylthio-6-chloropurine riboside (Rf 0.60). No contaminants visible at 25 µg loading (< 1%).

MASS SPETROMETRY: Matches the reference spectrum $[M]^+$= 382.4 amu.

STORAGE & STABILITY

Store over silica gel in tightly sealed container at -18°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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