

Certificate of Analysis



Compound Name	2'-Deoxyinosine 5'-triphosphate (dITP), 100 mM Sodium Salt Solution
CAS Number	95648-77-4
Catalog Number	DITP_100ML DITP_1000ML
Lot Number	101.633
Formula	C₁₀H₁₂N₄O₁₃P₃ (Anion)
Formula Weight	489.14 g/mol
Storage	at -20°C
Stability	24 months from Certification Date

	Test	Specification	Results
Biophysical	Appearance	clear colorless solution	conforms
	Concentration ⁽¹⁾ (A _{249 nm} , 22 °C, pH 7.0, ε = 12.2 l x mmol ⁻¹ x cm ⁻¹)	100-110 mM	104 mM
	pH (22 °C)	8.5 ± 0.2	8.4
HPLC	dITP (C18-RP-UV, 249 nm)	≥ 99.0% (area)	99.8%
	dIDP (C18-RP-UV, 249 nm)	≤ 0.5% (area)	0.2%
Anions & Cations	Chloride Cl ⁻ (Anion chromatography)	≤ 10 mM	2.2 mM
	Acetate CH ₃ COO ⁻ (GC/FID)	≤ 2 mM	0.2 mM
	Magnesium Mg ²⁺ (ICP-MS)	≤ 5 mM	0.02 mM
	Calcium Ca ²⁺ (ICP-MS)	≤ 0.25 mM	0.04 mM
	Total Heavy Metals ⁽²⁾ (ICP-MS)	≤ 5 µg x ml ⁻¹	0.5 µg x ml ⁻¹
Functional	DNases, RNases, Nicking Activity (FRET)	not detectable	conforms
	Proteases (UV-Vis)	not detectable	conforms

⁽¹⁾ Cavaluzzi & Borer (2004) Nucleic Acids Res. 32(1):e13⁽²⁾ Ba, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Sn, U⁽³⁾ Greisen et al. (1994) J. Clin. Microbiol. 32(2):335⁽⁴⁾ Fields et al. (2001) Toxicol. Sci. 63:107

Certification Date: 2018, April 16

Sebastian Buegener, Quality Control