

## ARCA Cap Analog NU-855-THR

<b>Product Name</b>	<b>m<sub>2</sub><sup>7,3'-O'</sup>GP<sub>3</sub>G (ARCA Cap Analog)</b>
Long Name	m <sub>2</sub> <sup>7,3'-O'</sup> G(5')ppp(5')G, Sodium Salt
Catalog Number	NU-855-THR
LOT Number	<b>XXX</b>
Formula	C <sub>22</sub> H <sub>31</sub> N <sub>10</sub> O <sub>18</sub> P <sub>3</sub> (free acid)
Molecular Weight	816.46 g x mol <sup>-1</sup> (free acid)
Exact Mass	816.10 g x mol <sup>-1</sup> (free acid)
Spectroscopic Properties	λ <sub>max</sub> = 255 nm; ε = 22.6 L x mmol <sup>-1</sup> x cm <sup>-1</sup> (Tris-HCl, pH 7.5)
Storage	store at -20 °C
Shelf Life	12 months after date of delivery

<b>Test</b>	<b>Specification</b>	<b>Result</b>
Form	solution in water	conforms
Color	colorless to slightly yellow	conforms
Concentration	100 mM – 105 mM	conforms
pH	7.25 ± 0.25	conforms
Purity	≥ 99 % (RP-HPLC)	<b>XY %</b>
Identification	MS negative and/or positive mode	conforms
Functionality (T7 IVT, 1400 nt transcript, fluorescence microplate assay)	≥ 30 µg RNA (80% substitution)	conforms
DNAases (gel electrophoresis)	not detectable (LOD: 0.002 U DNase I equiv.)	conforms
RNAases (gel electrophoresis)	not detectable (LOD: 1 pg RNase A equiv.)	conforms
Protease (UV-Vis)	not detectable (LOD: 5 ng Proteinase K equiv.)	conforms
Endotoxin (LAL test)	≤ 1.0 EU/ml	conforms