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CERTIFICATE OF ANALYSIS

Product Name mRNA Cap 2'-0-Methyltransferase GMP-grade (50 U/μΙ)

Catalog Number MET01-E59B Lot # 1M2895-4 **Storage Conditions** -20°C **Expiration Date** 2025-12-12

	Test	Specification Standard	Results
1	Appearance	The product name, batch number, storage conditions, and expiration date should be clearly visible. Each tube must be properly labeled and undamaged. The finished reagent box packaging must remain intact, with accurate instructions and label information. The liquid inside is colorless.	Pass
2	Foreign body	No visible foreign body	Pass
3	Enzyme activity	50-60 U/μL	51.1 U/µL
4	Protein concentration	>0.3 mg/ml	0.59 mg/ml
5	Protein Purity	≥95%	100%
6	Protease	The polyacrylamide gel electrophoresis shows no degradation of the protein substrate when 100U of the enzyme and 20µg of BSA substrate were added to a 20µl reaction system and incubated at 37°C for 3 hours.	Pass
7	Exonuclease	The agarose gel electrophoresis shows no changes in the DNA bands when 100U of the enzyme and 0.5μg of λDNA-HindIII digest were added to the reaction system and incubated at 37°C for 4 hours.	Pass
8	Nickase	100U of the enzyme and 0.5 µg of plasmid DNA were added into 20µl reaction system and incubated at 37 °C for 4 hours, the DNA bands of agarose gel electrophoresis did not change	Pass
9	RNase	100U of the enzyme and 0.5 μg 293T RNA were added into 20μl reaction system and incubated at 37 °C for 4 hours, the RNA band of agarose gel electrophoresis did not change	Pass
10	E. coli host protein	<50 ppm	Pass
11	E. coli host DNA	<10 fg/U	Pass
12	Endotoxin	<20 EU/mg	Pass
13	Mycoplasma examination	Negative	Pass

Approved by:

Quality Assurance

2025 - 04 - 01 Date