

Report of Analysis

Report Number	SA23I013	Report Date	September 06, 2023
Sample Name	Fluc-saRNA	Lot Number	P23H002
Package Size	0.1, 0.5, 1.0 mL/Tube	Manufacturing Date	August 04, 2023
Sample Source	CATUG	Receiving Date	August 04, 2023

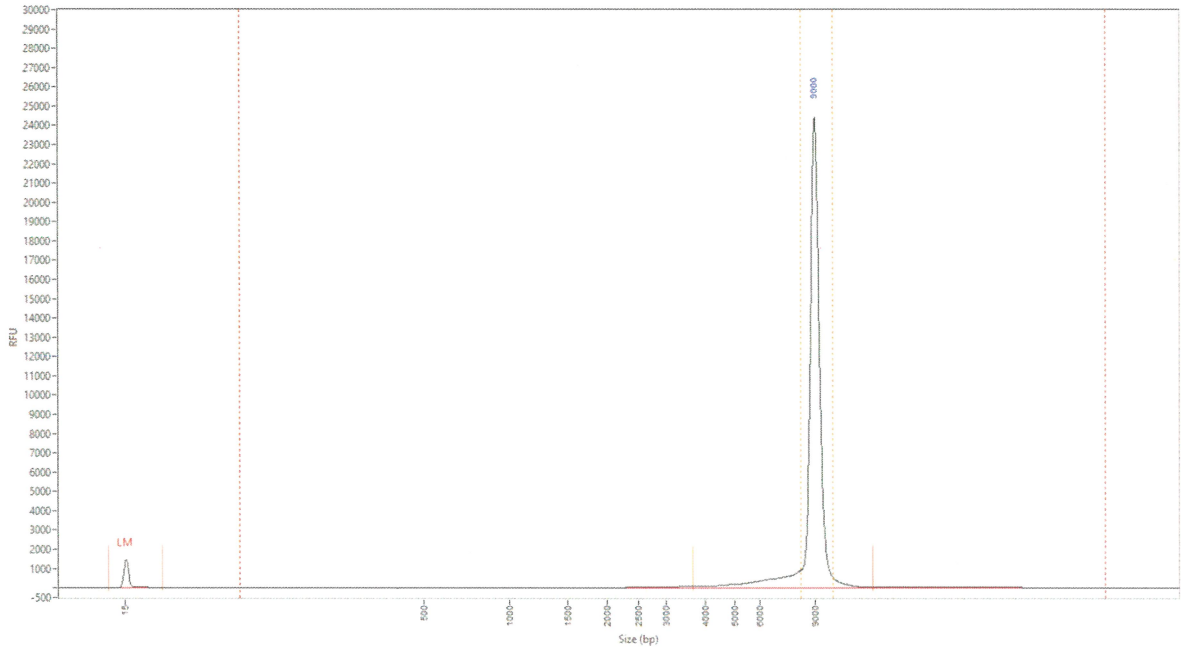
Test	Method	Result
Appearance	USP <790>	Colorless solution
Content	UV-vis	1.0 mg/mL
A260/A280	UV-vis	2.2
pH	USP <791>	6.58
Integrity	CE	82.6 %
% Poly A tailed	HPLC	85.5 %
5' capping efficiency	LC-MS	> 99.0 %
Poly A tail distribution	LC-MS	Page 4-5
Residual protein	Fluorescence	< 0.52 µg/mg
Residual DNA template	qPCR	0.19 ng/mg
dsRNA	ELISA	335 ng/mg
Endotoxin	USP <85>	< 1 EU/mL
In vitro expression	Cell-Based Assay	Observed expression of target protein

Reported By/Date: *Lu Liang Sep. 06, 2023*

Reviewed By/Date: *Tengjun Huang Sep. 06, 2023*

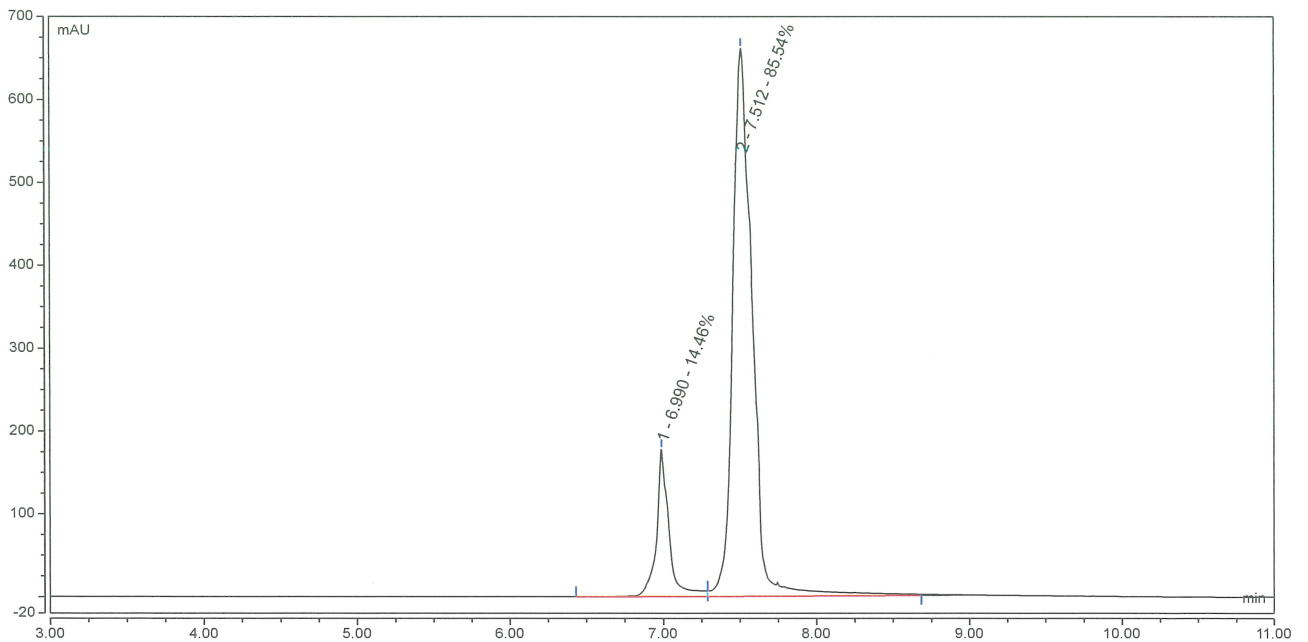
Approved By/Date: *Michael Zhang Sep. 06, 2023*

Integrity - CE

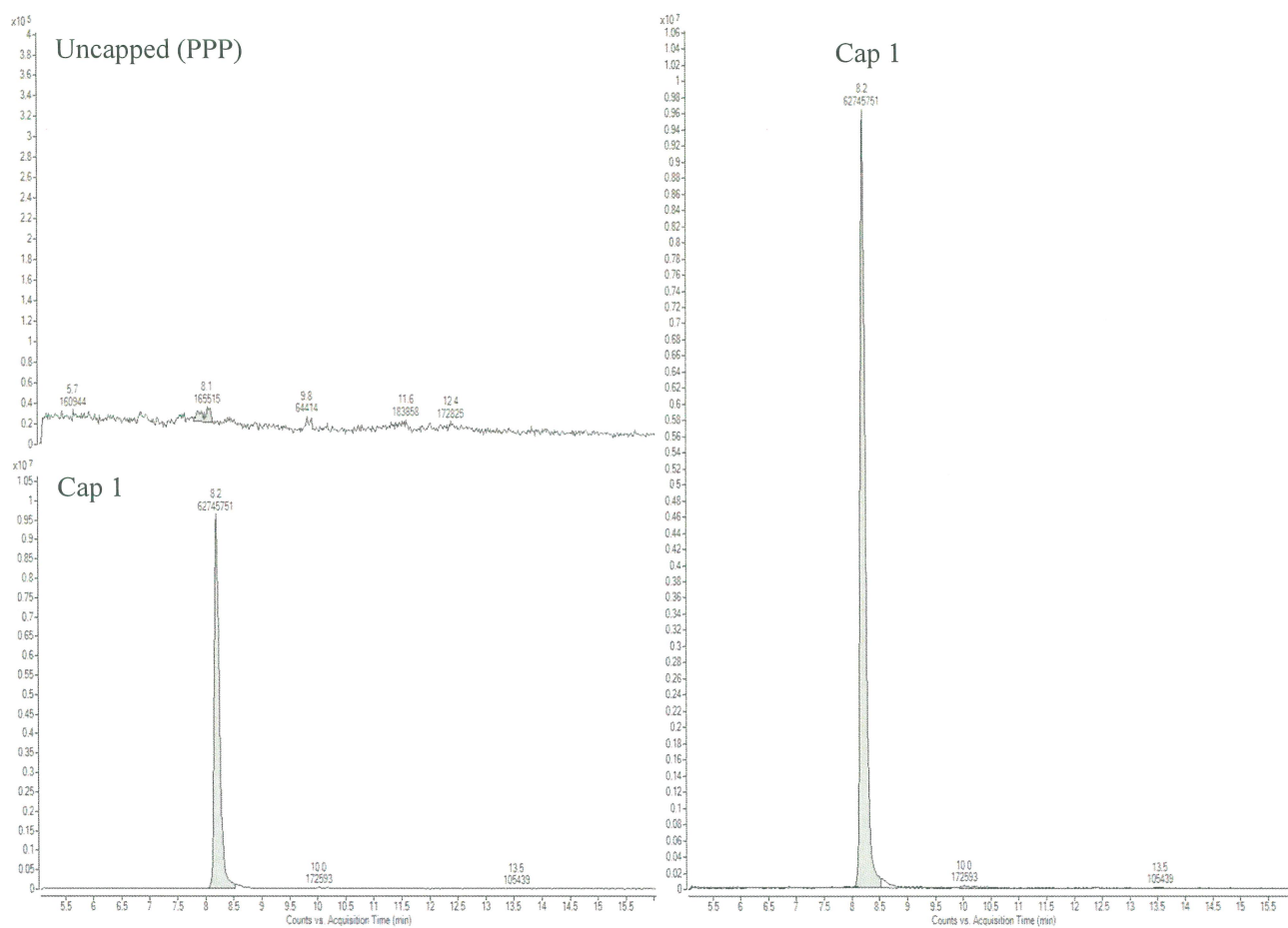


Smear Analysis	200 bp to 25000 bp	17.1280 ng/ul	99.6 %Total	3.1793 nmole/L	8869 Avg. Size (bp)
	8200 bp to 10000 bp	14.1957 ng/ul	82.6 %Total	2.5850 nmole/L	9041 Avg. Size (bp)

% Poly A tailed - HPLC

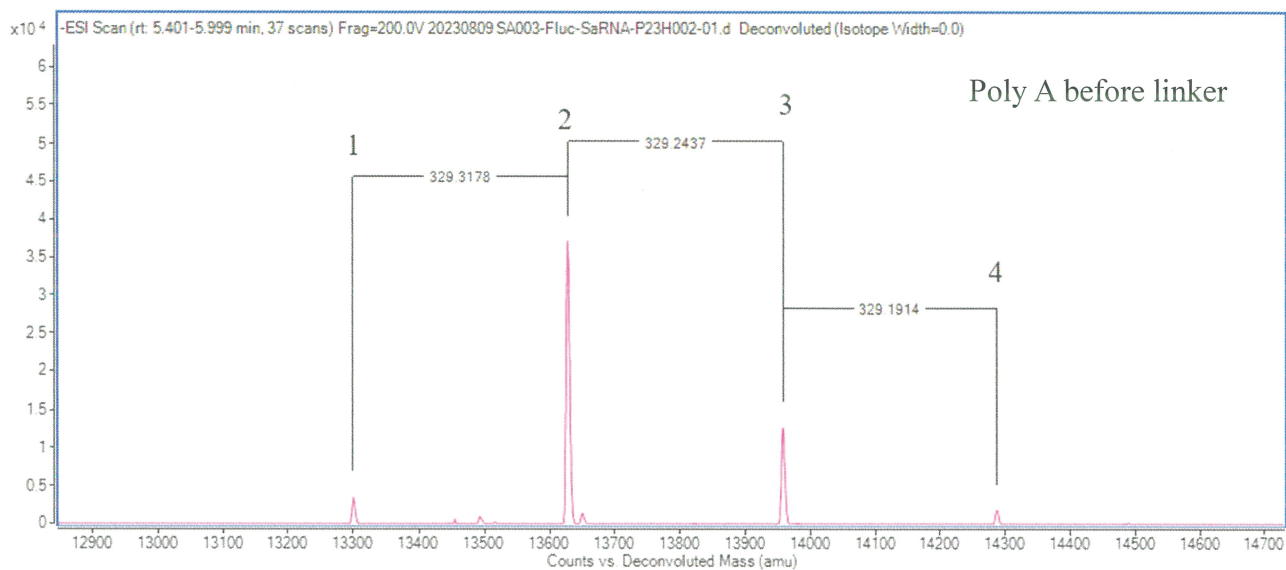


5' capping efficiency - LC/MS

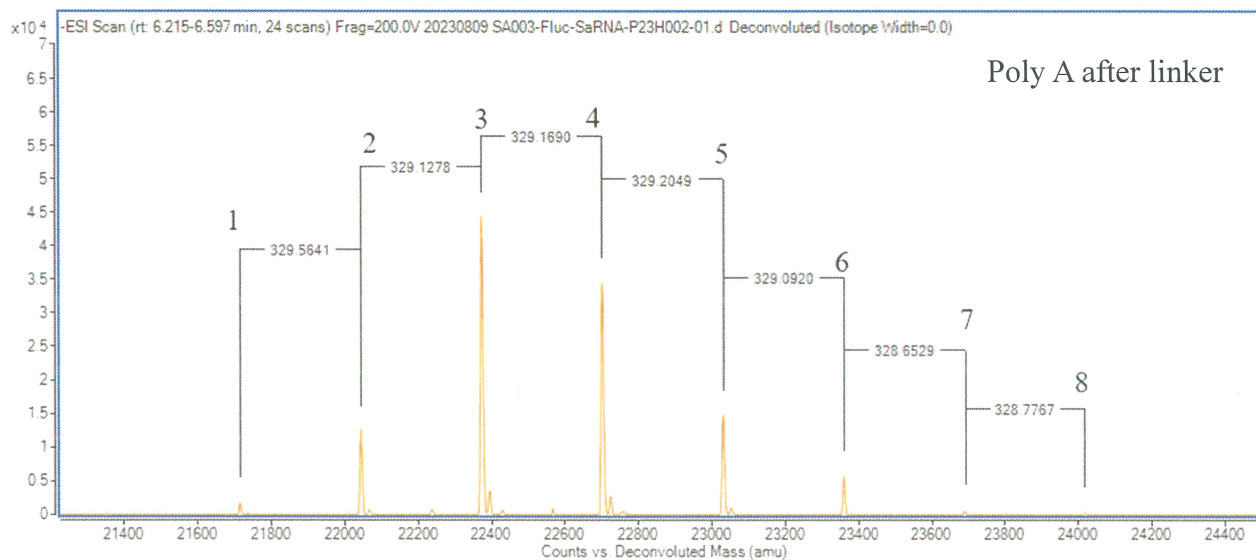


Name	RT (min)	Area	Area (%)
Uncapped (PPP)	N.D.	N.D.	N.D.
Cap 1	8.2	62745751	> 99.0

Poly A tail distribution- LC/MS



NO.	Theoretical sequence	Measured MW	Theoretical average MW	Signal intensity	Signal intensity (%)
1	UUUUUAAUAUUUCA ₃₀ Gp	13299.8380	13220.1108	3443.73	6.3
2	UUUUUAAUAUUUCA ₃₁ Gp	13629.1558	13629.2971	37124.48	67.5
3	UUUUUAAUAUUUCA ₃₂ Gp	13958.3995	13958.5034	12674.46	23.0
4	UUUUUAAUAUUUCA ₃₃ Gp	14287.5909	14287.7098	1769.25	3.2



NO.	Theoretical sequence	Measured MW	Theoretical average MW	Signal intensity	Signal intensity (%)
1	ACUA ₆₃ Gp	21714.2881	21714.5694	1794.33	1.6
2	ACUA ₆₄ Gp	22043.8522	22043.7758	12340.31	10.8
3	ACUA ₆₅ Gp	22372.9800	22372.9821	44173.19	38.7
4	ACUA ₆₆ Gp	22702.1490	22702.1885	34444.06	30.2
5	ACUA ₆₇ Gp	23031.3538	23031.3948	14699.47	12.9
6	ACUA ₆₈ Gp	23360.4458	23360.6012	5699.63	5.0
7	ACUA ₆₉ Gp	23689.0986	23689.8075	534.46	0.5
8	ACUA ₇₀ Gp	24017.8754	24019.0139	368.30	0.3