

## Report of Analysis

Report Number	CLT24G030	Report Date	July 19, 2024
Sample Name	Fluc mRNA	Lot Number	P24G001
Package Size	1.0, 5.0 mg/Tube	Manufacturing Date	July 04, 2024
Sample Source	CATUG	Receiving Date	July 04, 2024

Test	Method	Result
Appearance	Visual	Clear, colorless solution
Content	UV-vis	1.0 mg/mL
A260/A280	UV-vis	1.9
pH	USP <791>	6.28
Integrity	CE	93.6 %
Purity	HPLC	81.3 %
5' capping efficiency	LC-MS	> 99.0 %
Poly A tail distribution	LC-MS	100-105 A
Residual protein	Fluorescence	1.3 µg/mg
Residual DNA template	qPCR	< 0.05 ng/mg
dsRNA	ELISA	176.3 ng/mg
Endotoxin	USP <85>	< 10 EU/mL
In vitro expression	SDS-page	Expressed protein size matches expectation

Reported By/Date: *Jinyao Chen July 19, 2024*

Reviewed By/Date: *Xining Xu July 19, 2024*

Approved By/Date: *Tengjun Huang July 19, 2024*

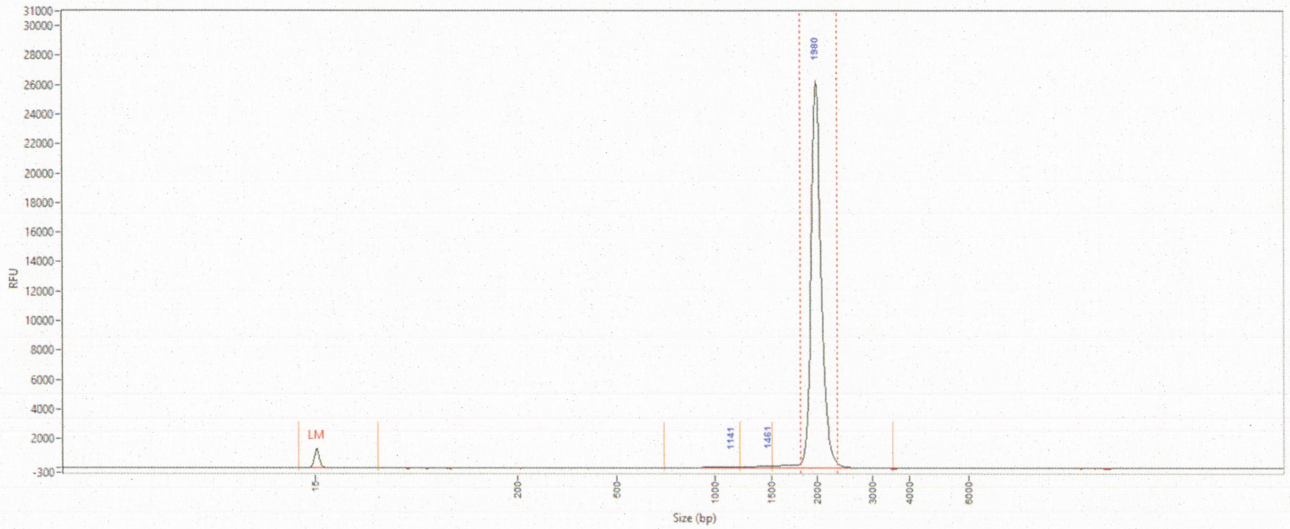
CATUG Life Technology (Suzhou) Co., Ltd.

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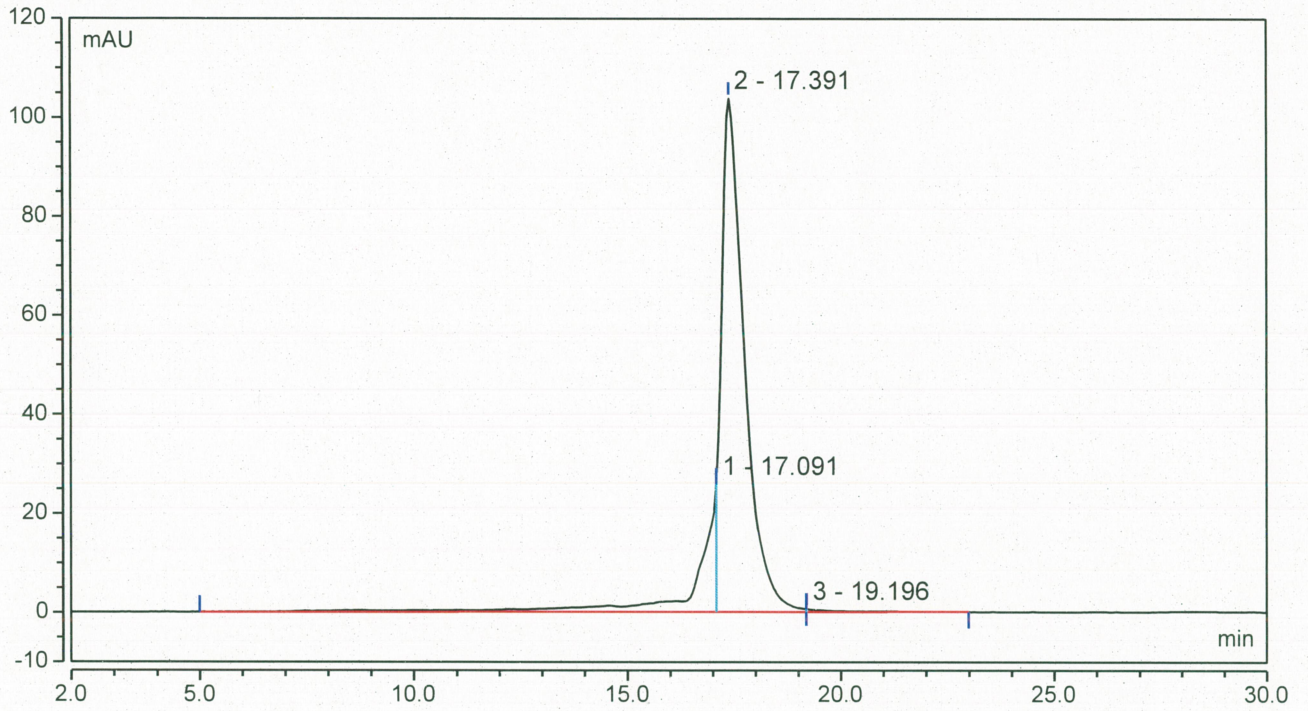
Address: Building 4, Zone A, Biomedical Industrial Park III, No. 1 Xinze Road, Industrial Park, Suzhou, Jiang

Integrity - CE



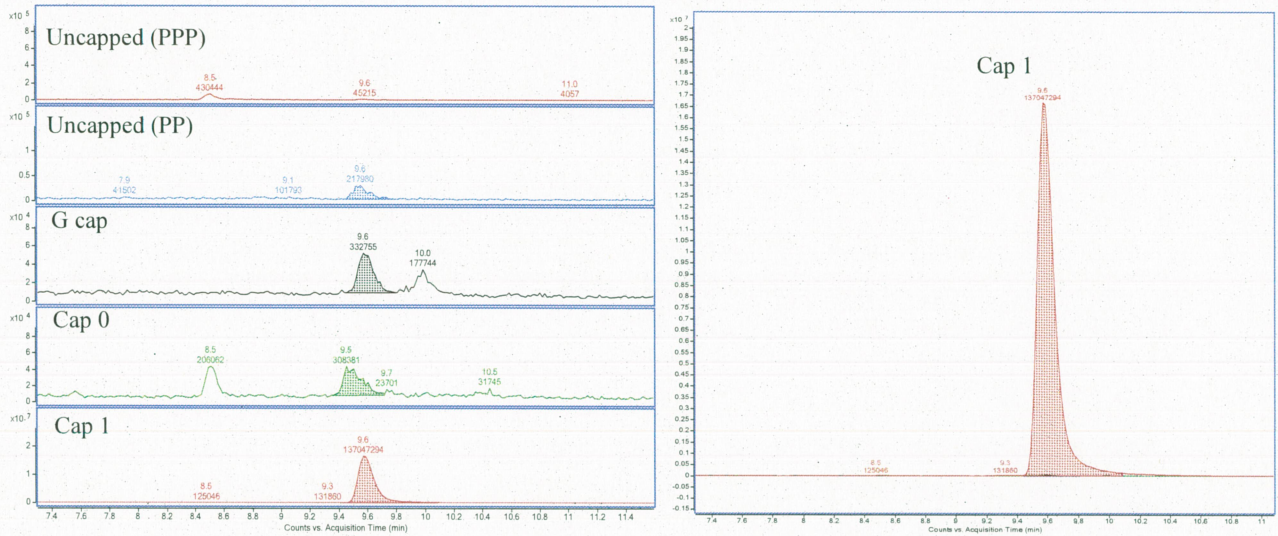
Smear Analysis    1795 bp to 2355 bp    153.1466 ng/ul    93.6 %Total    125.9808 nmole/L    2001 Avg. Size (bp)

Purity - HPLC



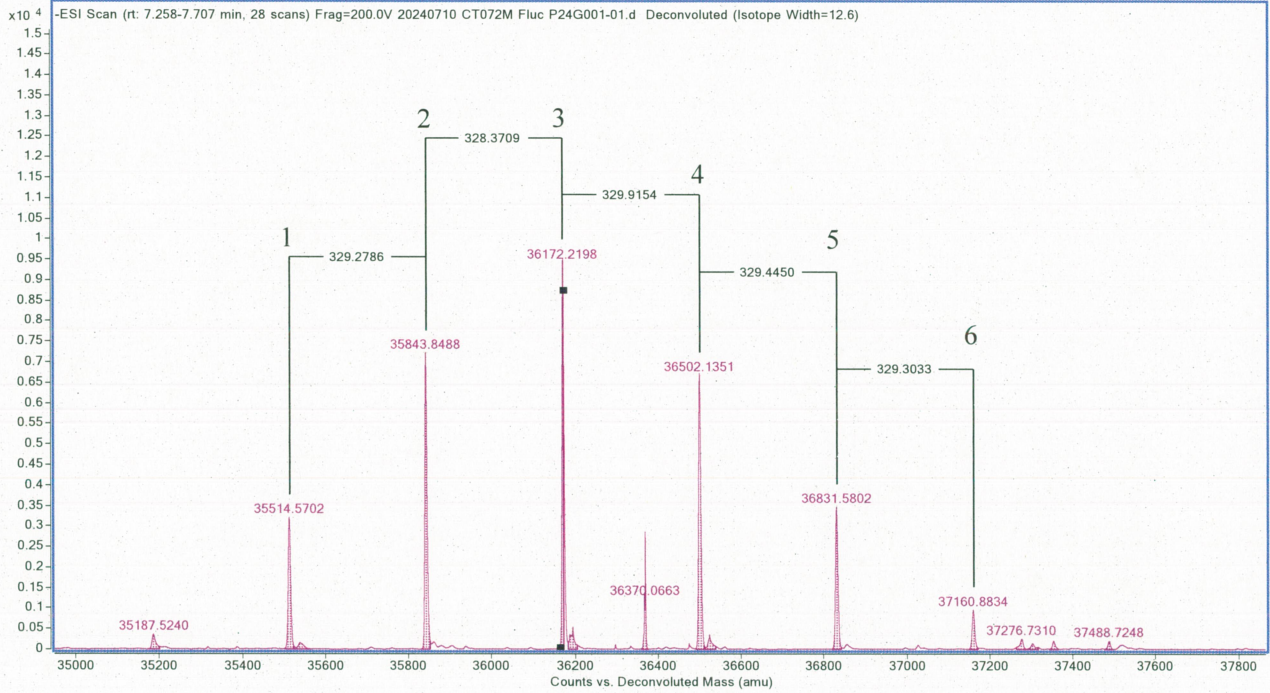
RT (min)	Area	Area (%)
17.091	14.277	18.2
17.391	63.828	81.3
19.196	0.440	0.6

5' capping efficiency - LC/MS



Name	RT (min)	Area	Area (%)
Uncapped (PPP)	N.D.	N.D.	N.D.
Uncapped (PP)	9.6	217980	0.2
G Cap	9.6	332755	0.2
Cap 0	9.5	308381	0.2
Cap 1	9.6	137047294	> 99.0

Poly A tail distribution- LC/MS



NO.	Theoretical sequence	Theoretical average MW	Measured MW	Signal intensity	Signal intensity (%)
1	Am1ΨCA <sub>100</sub> m1ΨCm1ΨAGp	35513.2115	35514.5702	3200	10.4
2	Am1ΨCA <sub>101</sub> m1ΨCm1ΨAGp	35842.4179	35843.8488	7208	23.3
3	Am1ΨCA <sub>102</sub> m1ΨCm1ΨAGp	36171.6243	36172.2198	9413	30.5
4	Am1ΨCA <sub>103</sub> m1ΨCm1ΨAGp	36500.8307	36502.1351	6668	21.6
5	Am1ΨCA <sub>104</sub> m1ΨCm1ΨAGp	36830.0371	36831.5802	3461	11.2
6	Am1ΨCA <sub>105</sub> m1ΨCm1ΨAGp	37159.2435	37160.8834	952	3.1

In vitro expression - SDS-page

