

Report of Analysis

Report Number	CLT241017	Report Date	September 10, 2024
Sample Name	EGFP-Cy3 mRNA	Lot Number	P24I004
Package Size	0.1, 1.0 mg/tube	Manufacturing Date	September 03, 2024
Sample Source	CATUG	Receiving Date	September 04, 2024

Test	Method	Result
Appearance	USP <790>	Clear, magenta solution
pH	USP <791>	6.56
Content	UV-Vis	1.0 mg/mL
A260/A280	UV-Vis	1.9
Identity	Sanger sequencing	ORF sequence 100% matches
Integrity	CE	92.4 %
5' capping efficiency	LC-MS	> 99.0 %
Poly(A) tail distribution	LC-MS	98-106 A
Residual DNA template	qPCR	< 0.01 ng/mg
dsRNA	ELISA	78.0 ng/mg
Endotoxin	Gel-clot assay	< 1 EU/mL
In vitro expression	SDS-page	Expressed protein size matches expectation

Reported By/Date: *Lu Liang September 10, 2024* Reviewed By/Date: *Xining Xu September 10, 2024*

Approved By/Date: *Fengjun Huang September 10, 2024*

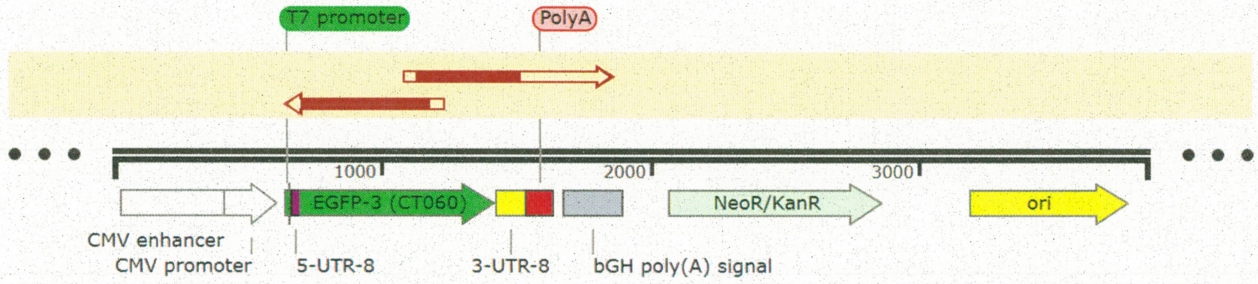
CATUG Life Technology (Suzhou) Co., Ltd.

Website: www.catug.bio

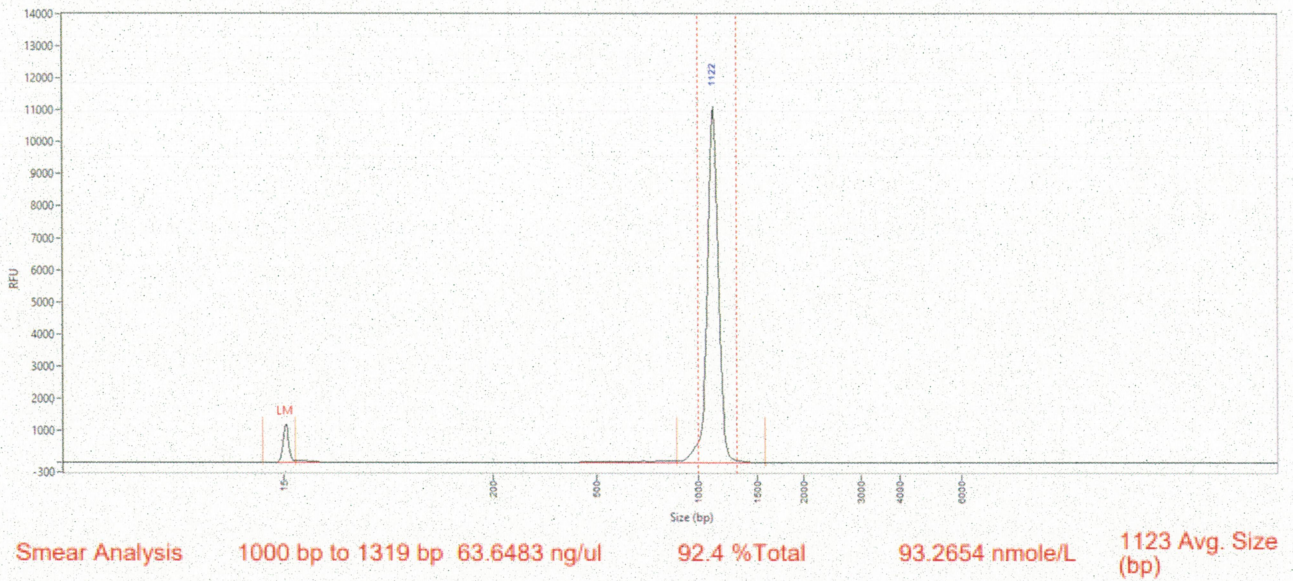
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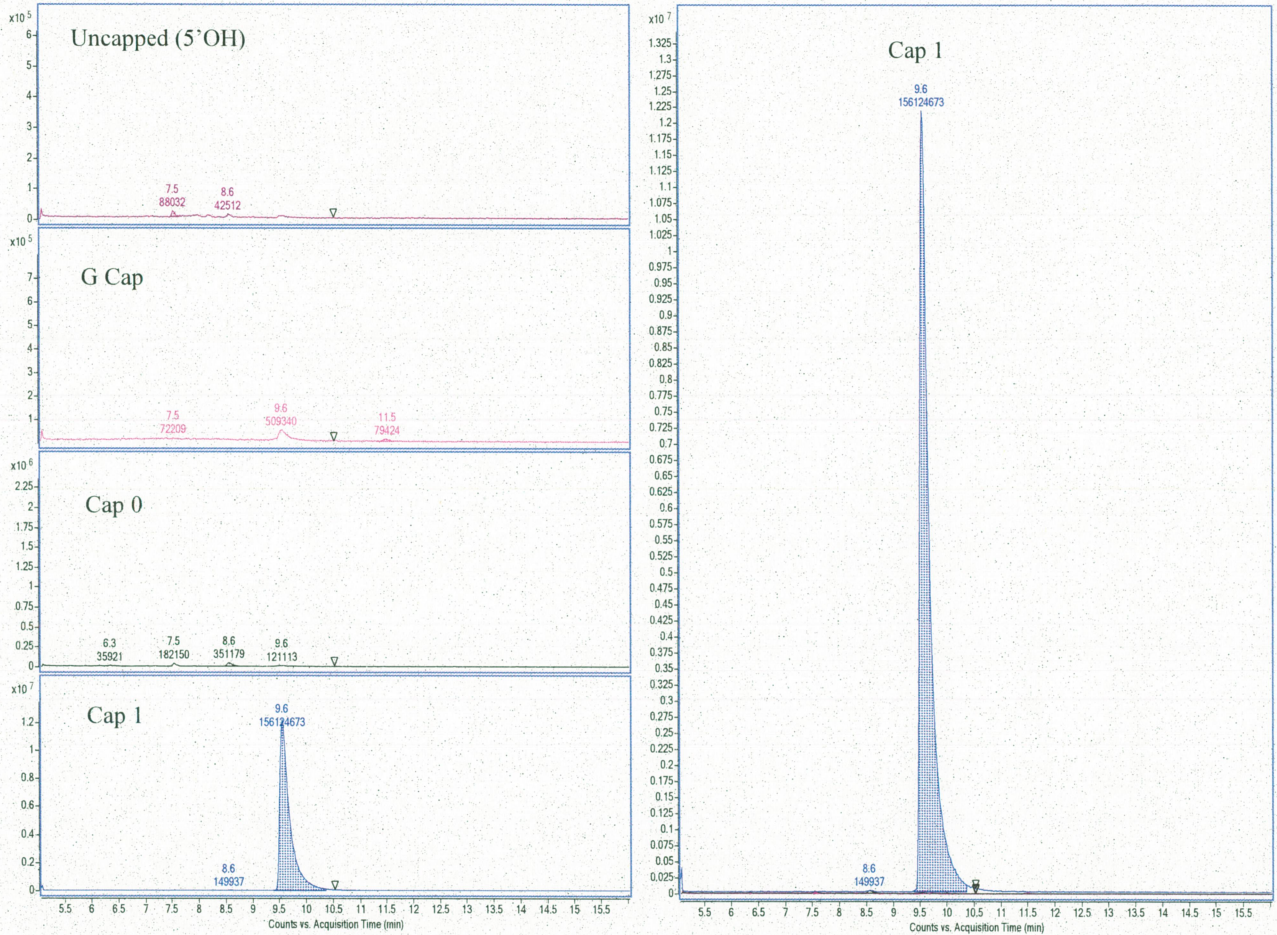
Identity - Sanger sequencing



Integrity - CE

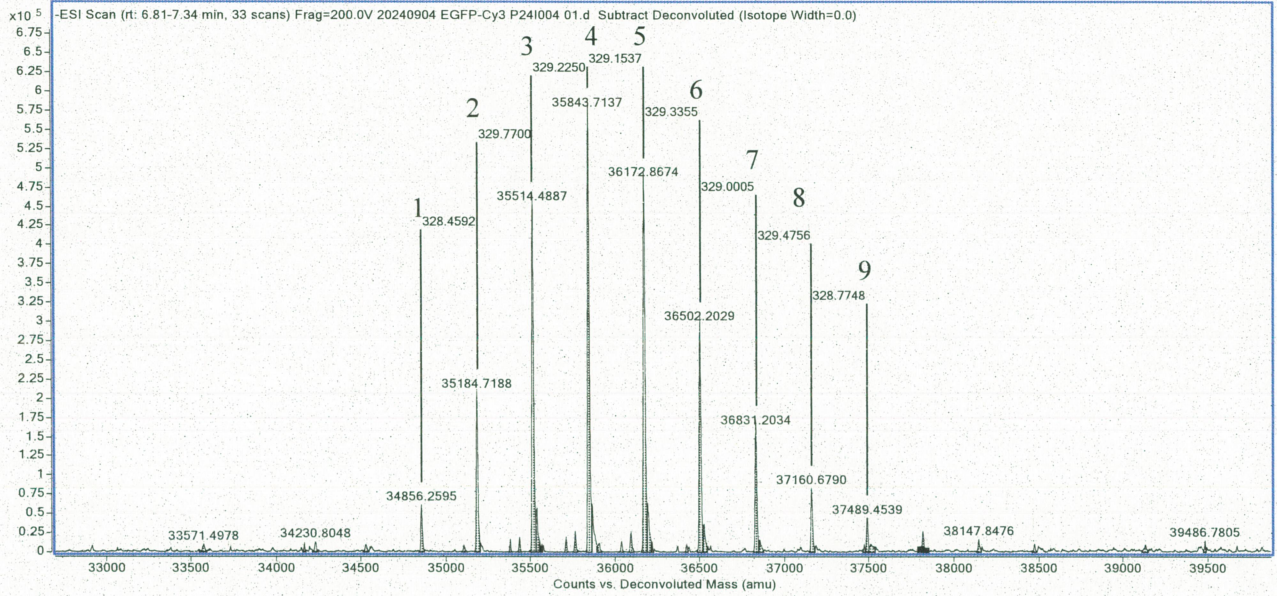


5' capping efficiency - LC-MS



Name	RT (min)	Area	Area(%)
Uncapped (5'OH)	N.D.	N.D.	N.D.
G Cap	N.D.	N.D.	N.D.
Cap 0	N.D.	N.D.	N.D.
Cap 1	9.6	156124673	> 99.0

Poly(A) tail distribution - LC-MS



NO.	Theoretical sequence	Theoretical average MW	Measured MW	Signal intensity	Signal intensity (%)
1	Am1ΨCA ₉₈ m1ΨCm 1ΨAGp	34854.7988	34856.2595	61228	2.6
2	Am1ΨCA ₉₉ m1ΨCm 1ΨAGp	35184.0051	35184.7188	207993	8.8
3	Am1ΨCA ₁₀₀ m1ΨC m1ΨAGp	35513.2115	35514.4887	452085	19.1
4	Am1ΨCA ₁₀₁ m1ΨC m1ΨAGp	35842.4179	35843.7137	574567	24.3
5	Am1ΨCA ₁₀₂ m1ΨC m1ΨAGp	36171.6242	36172.8674	484040	20.5
6	Am1ΨCA ₁₀₃ m1ΨC m1ΨAGp	36500.8306	36502.2029	296159	12.5
7	Am1ΨCA ₁₀₄ m1ΨC m1ΨAGp	36830.0369	36831.2034	160461	6.8
8	Am1ΨCA ₁₀₅ m1ΨC m1ΨAGp	37159.2433	37160.679	82939	3.5
9	Am1ΨCA ₁₀₆ m1ΨC m1ΨAGp	37488.4496	37489.4539	43766	1.9

In vitro expression - SDS-page

