

Report of Analysis

Report Number	CLT24G032	Report Date	July 19, 2024
Sample Name	OVA mRNA	Lot Number	P24G006
Package Size	0.1, 0.5, 1.0 mg/Tube	Manufacturing Date	July 09, 2024
Sample Source	CATUG	Receiving Date	July 10, 2024

Test	Method	Result
Appearance	Visual	Clear, colorless solution
Content	UV-vis	2.0 mg/mL
A260/A280	UV-vis	1.9
pH	USP <791>	6.82
Integrity	CE	96.7 %
Purity	HPLC	93.4 %
5' capping efficiency	LC-MS	95.6 %
Poly A tail distribution	LC-MS	102-113 A
Residual protein	Fluorescence	< 2.0 µg/mg
Residual DNA template	qPCR	< 0.05 ng/mg
dsRNA	ELISA	150.0 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

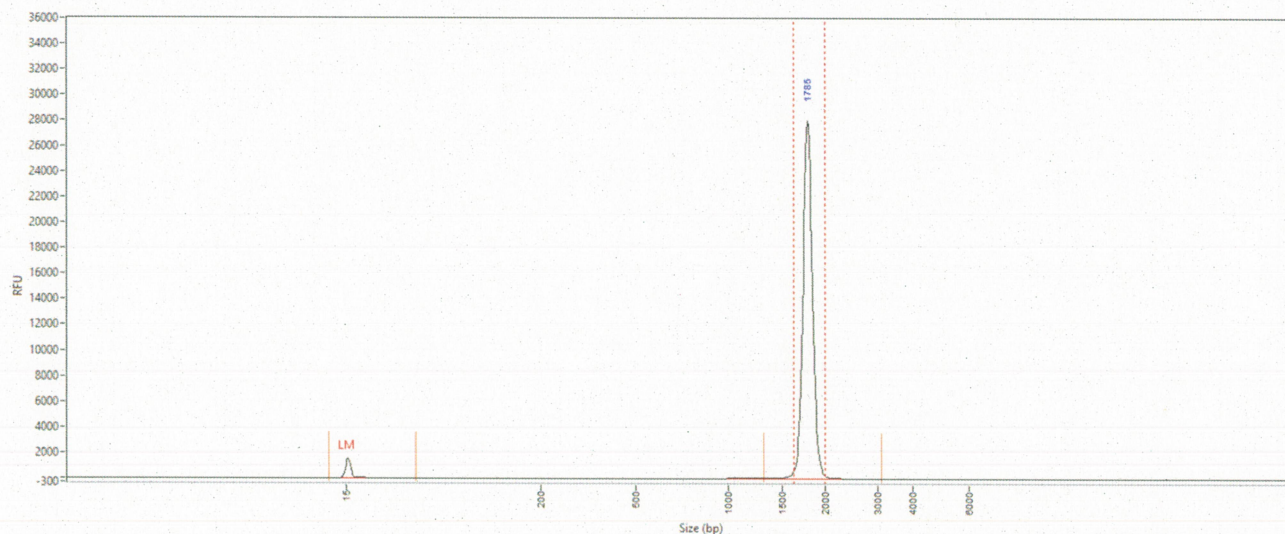
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Integrity - CE



Smear Analysis

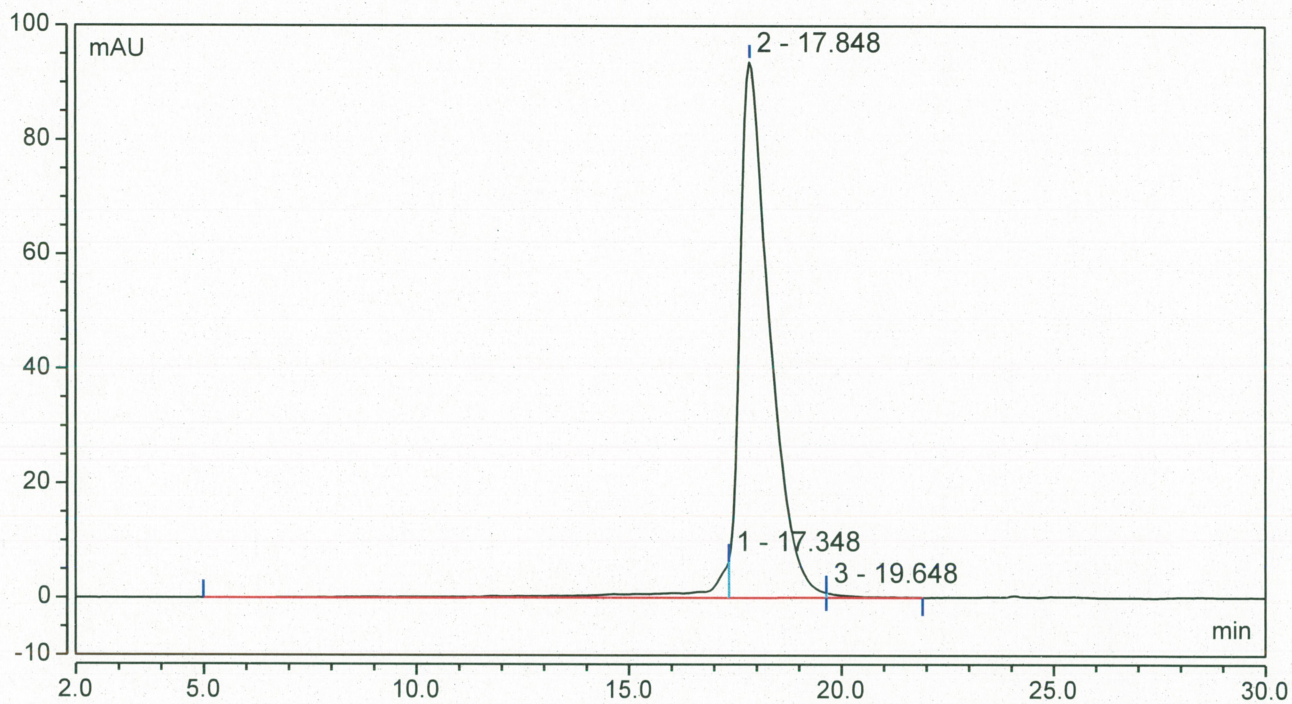
1620 bp to 1990 bp 122.8772 ng/ul

96.7 %Total

113.0203 nmole/L

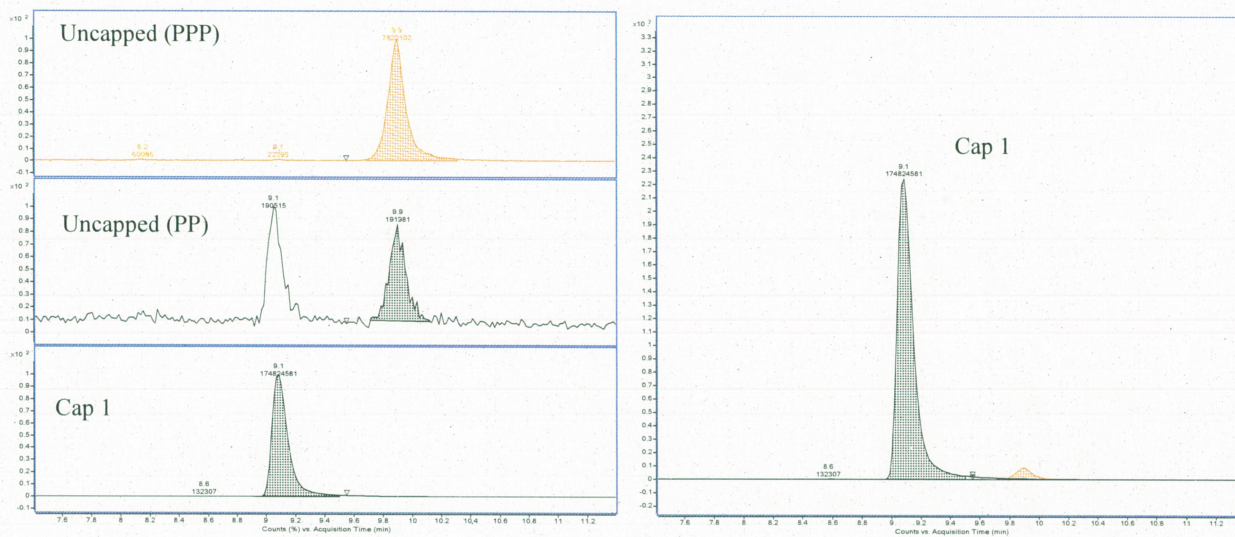
1790 Avg. Size
(bp)

Purity - HPLC



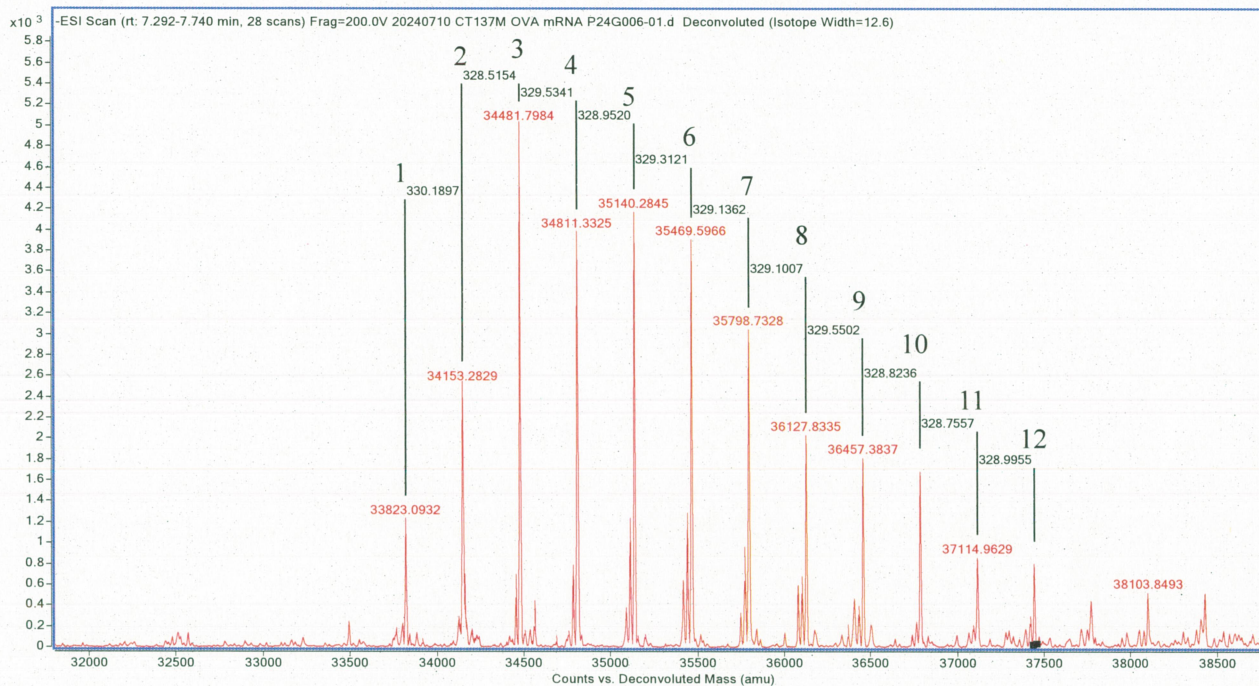
RT (min)	Area	Area (%)
17.348	4.834	6.0
17.848	75.459	93.4
19.648	0.490	0.6

5' capping efficiency - LC/MS



Name	RT (min)	Area	Area (%)
Uncapped (PPP)	9.9	7822102	4.3
Uncapped (PP)	9.9	191981	0.1
Cap 1	9.1	174824581	95.6

Poly A tail distribution- LC/MS



NO.	Theoretical sequence	Theoretical average MW	Measured MW	Signal intensity	Signal intensity (%)
1	CA ₁₀₂	33822.2652	33823.0932	1226	4.0
2	CA ₁₀₃	34151.4740	34153.2829	2510	8.1
3	CA ₁₀₄	34480.6828	34481.7984	5007	16.1
4	CA ₁₀₅	34809.8916	34811.3325	3974	12.8
5	CA ₁₀₆	35139.1004	35140.2845	4165	13.4
6	CA ₁₀₇	35468.3092	35469.5966	3904	12.6
7	CA ₁₀₈	35797.5180	35798.7328	3042	9.8
8	CA ₁₀₉	36126.7268	36127.8335	2029	6.5
9	CA ₁₁₀	36455.9356	36457.3837	1810	5.8
10	CA ₁₁₁	36785.1444	36786.2072	1685	5.4
11	CA ₁₁₂	37114.3532	37114.9629	855	2.8
12	CA ₁₁₃	37443.5620	37443.9584	800	2.6

In vitro expression - SDS-page

