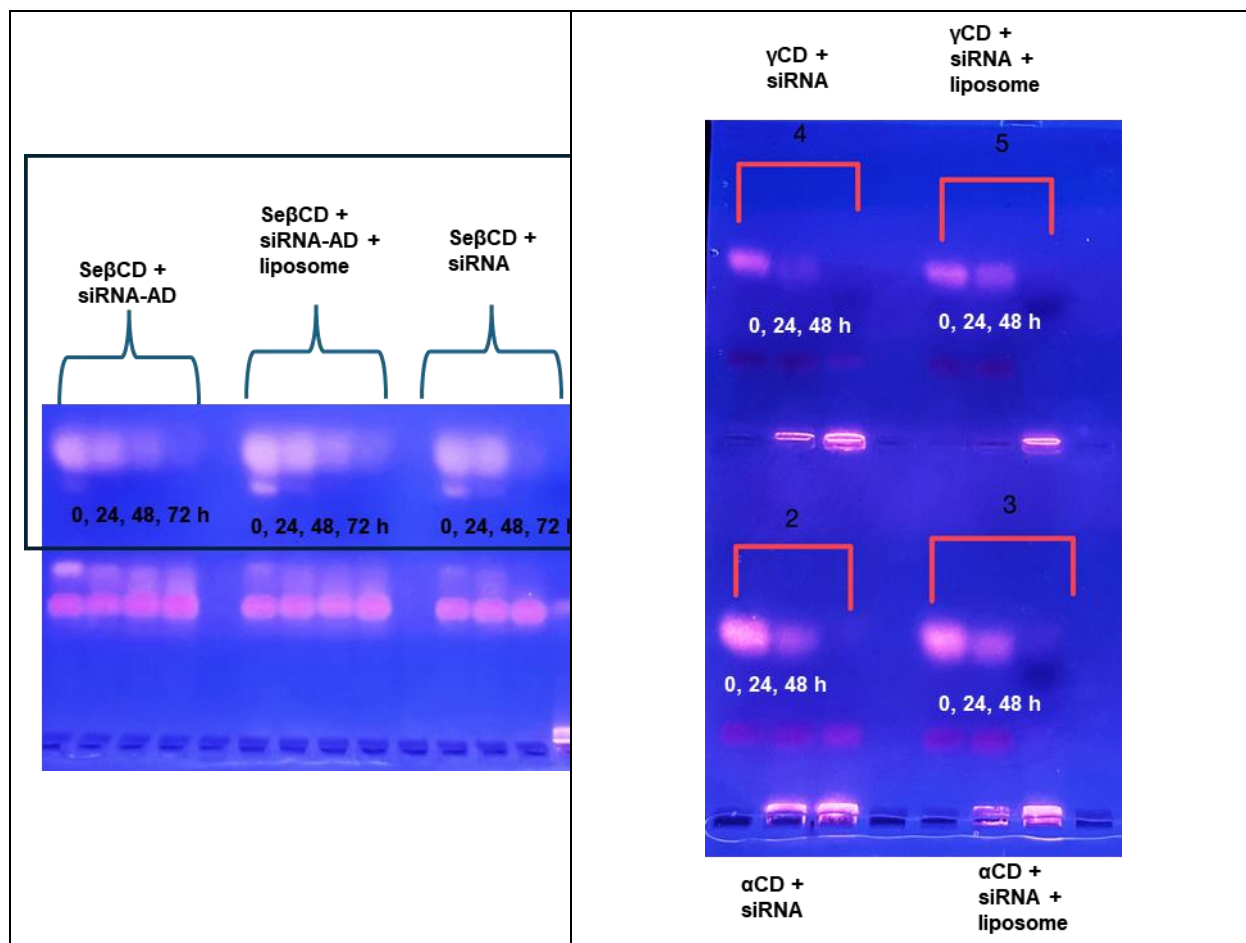
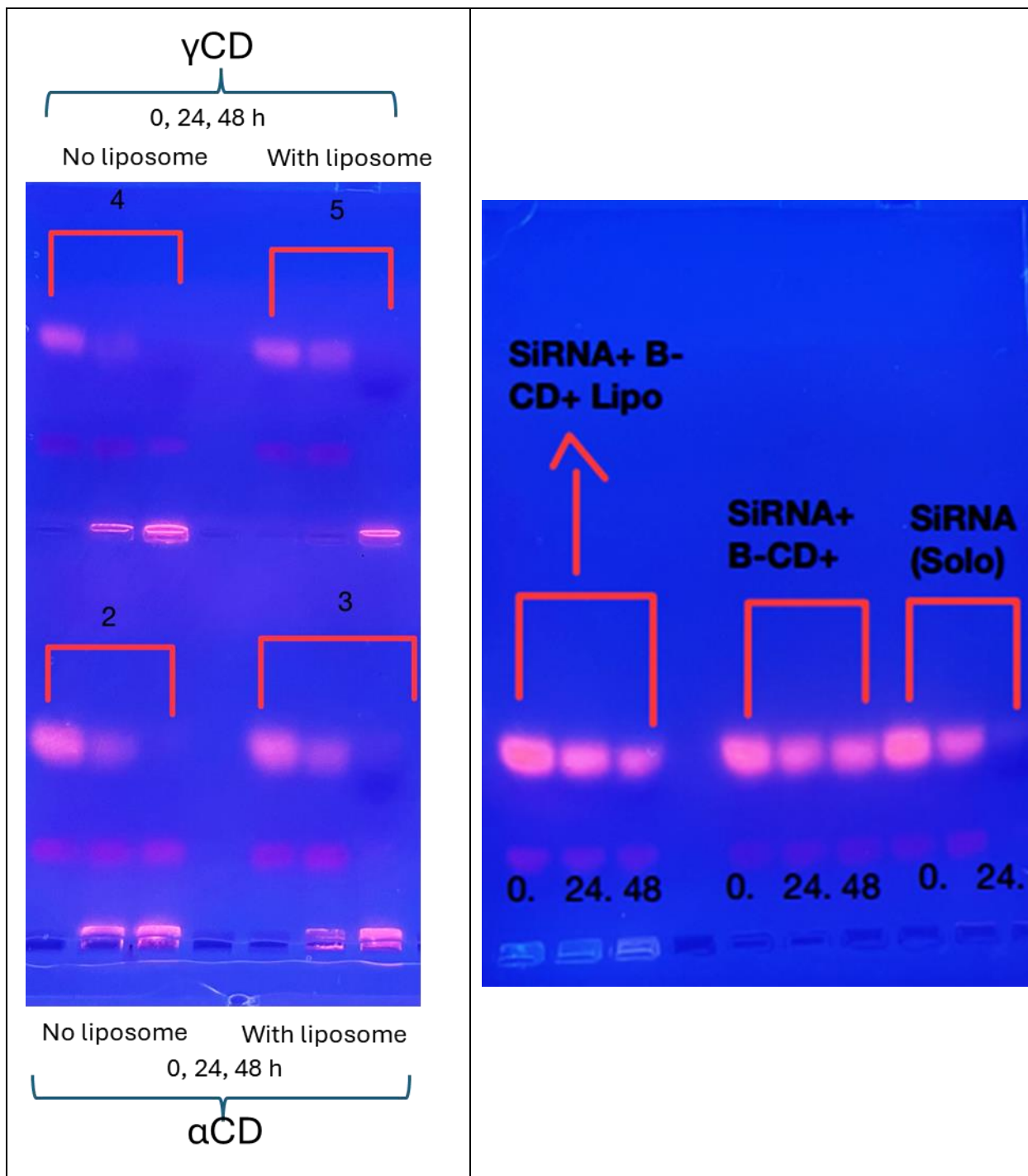


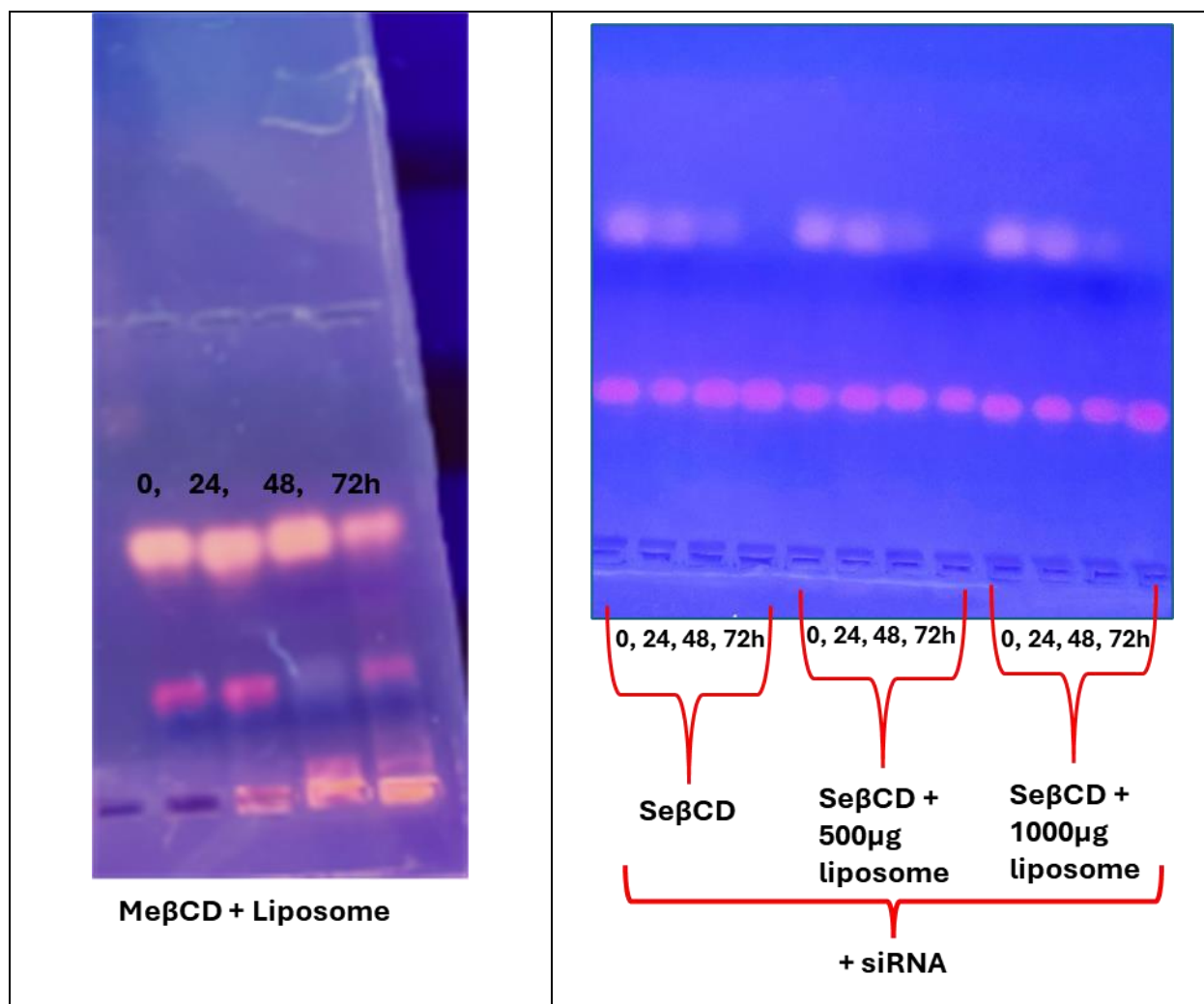
Effect of cyclodextrins formulated in liposomes and gold and selenium nanoparticles on the siRNA stability in cell culture medium

Supplemental Data

Figure S1: Agarose gels electrophoresis of siRNAs. All gels were run in 50% FBS and PBS (pH 7.2) - all gels have NC siRNA (when not specified that AD-siRNA was used instead).







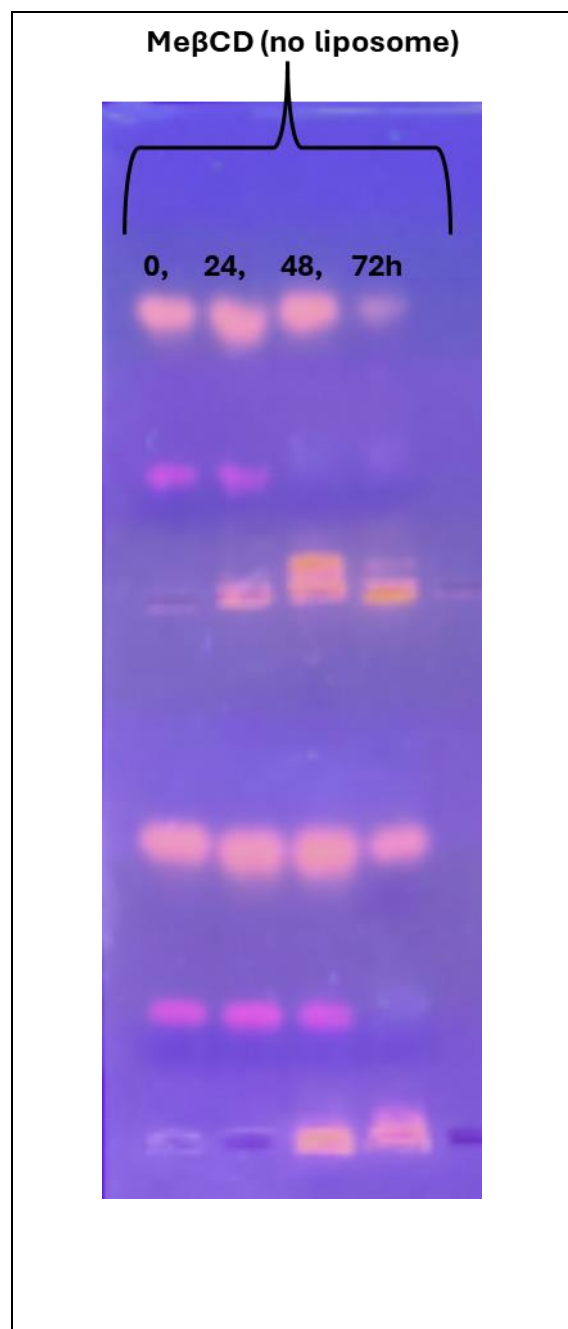


Figure S2: DLS result of the optimum concentration (solution --highlighted on Table S1)

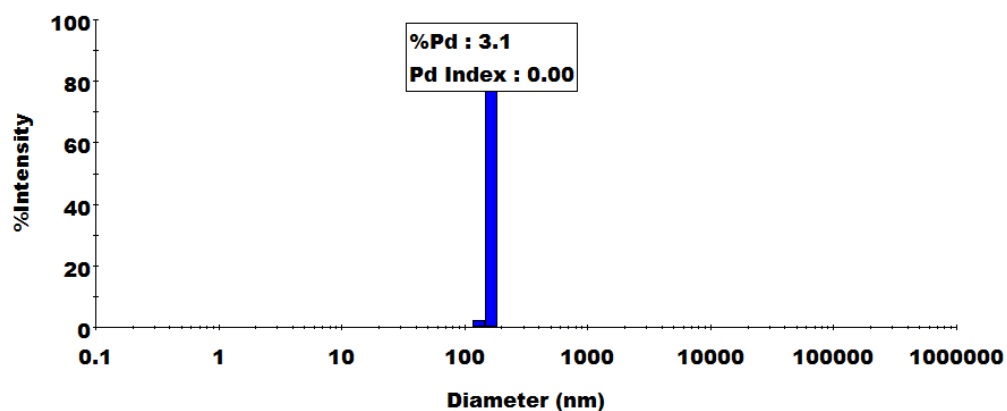


Figure S3: DLS result of the optimum concentration (solution --highlighted on Table S2)

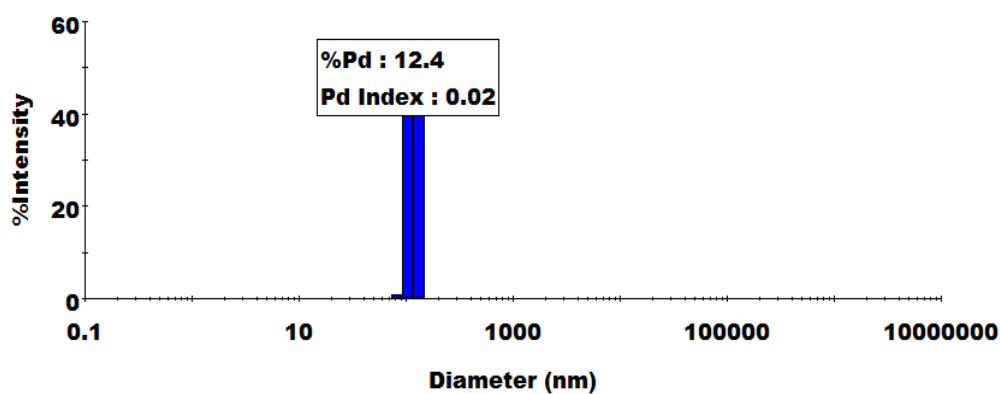


Figure S4: DLS result of the optimum concentration (solution --highlighted on Table S4)

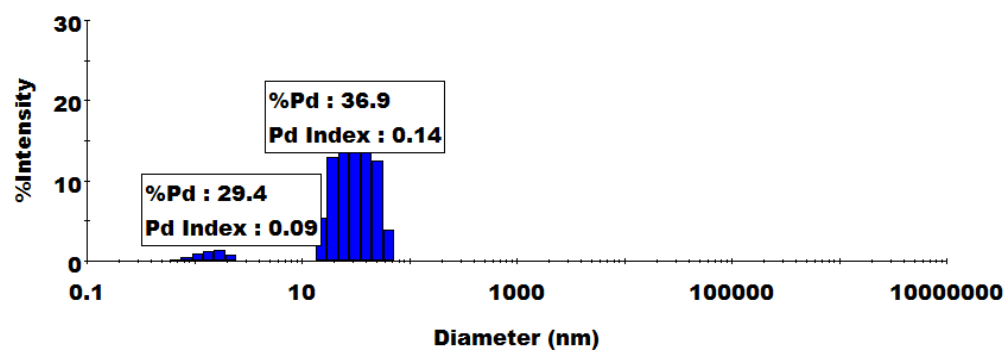


Figure S5: DLS result of the optimum concentration (solution– highlighted on Table S5)

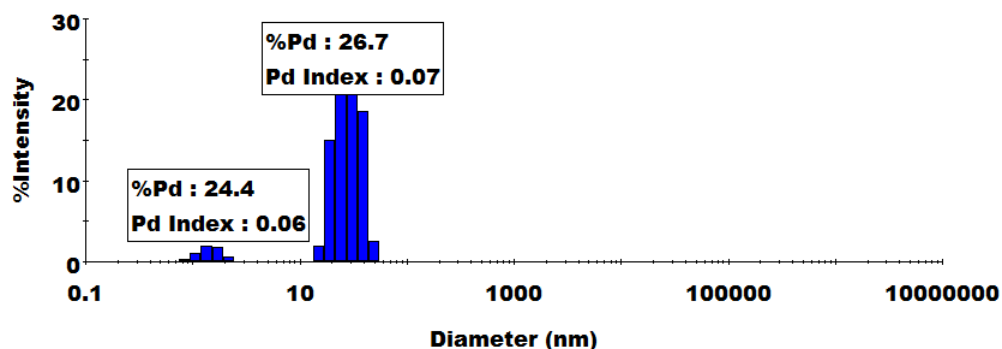


Table S1: Determining the optimal concentration of the reducing agent, ascorbic acid (Vc) for the synthesis of selenium nanoparticles

mM Vc	Diameter (nm)	SD	Zeta Potential	SD	Se:Vc ratio
4	177	4	-24	1	1:2
8	169	1	-35	1	1:4
12	162	1	-28	1	1:6

Table S2: Determining the optimal concentration of selenium salt for the synthesis of selenium nanoparticles

mM Na ₂ SeO ₃	Diameter (nm)	SD	Zeta Potential	SD
1	219	4	-19	3
2	115	1	-21	2
4	141	2	-43	2

Table S3: Determining the optimal concentration of β CD for the synthesis of cyclodextrin-modified selenium nanoparticles

mM CD	Diameter (nm)	SD	Zeta Potential	SD	%CD en NP by NMR
0	115	1	-21	2	0
1	153	7	-1	0	Not determined
8	195	2	-7.1	0.4	84

Table S4: Determining the optimal concentration of the reducing agent, Sodium -citrate (Ct) for the synthesis of gold nanoparticles

mM Ct	Diameter (nm)	SD	Zeta Potential	SD	Se : V Au:Cte ratio
4	29	2	-26	2	1:2
8	24	1	-13.2	0.4	1:4
12	34	2	-4	1	1:6

Table S5: Determining the optimal concentration of gold salt for the synthesis of gold nanoparticles

mM H ₂ AuCl ₄	Diameter (nm)	SD	Zeta Potential	SD
1	17.9	0.2	-7.4	0.9
2	20.7	0.2	-6	2
4	294	100	-19	2

Table S6: Determining the optimal concentration of β CD for the synthesis of cyclodextrin-modified gold nanoparticles

mM CD	Diameter (nm)	SD	Zeta Potential	SD	%CD en NP by NMR
0	20.7	0.2	-6	2	0
4	23.3	0.1	-23	2	Not determined
8	24.6	0.6	-20	2	73
12	19.9	0.1	-36	1	86
16	20.2	0.1	-37	1	Not determined