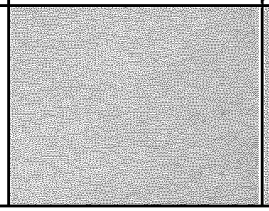
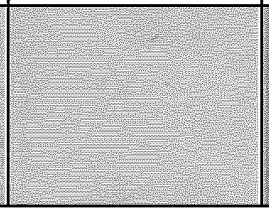
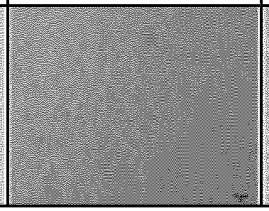
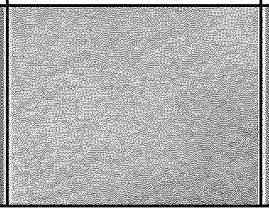
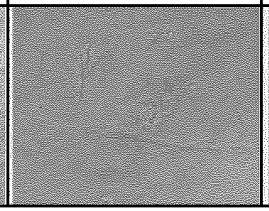
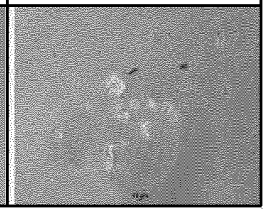
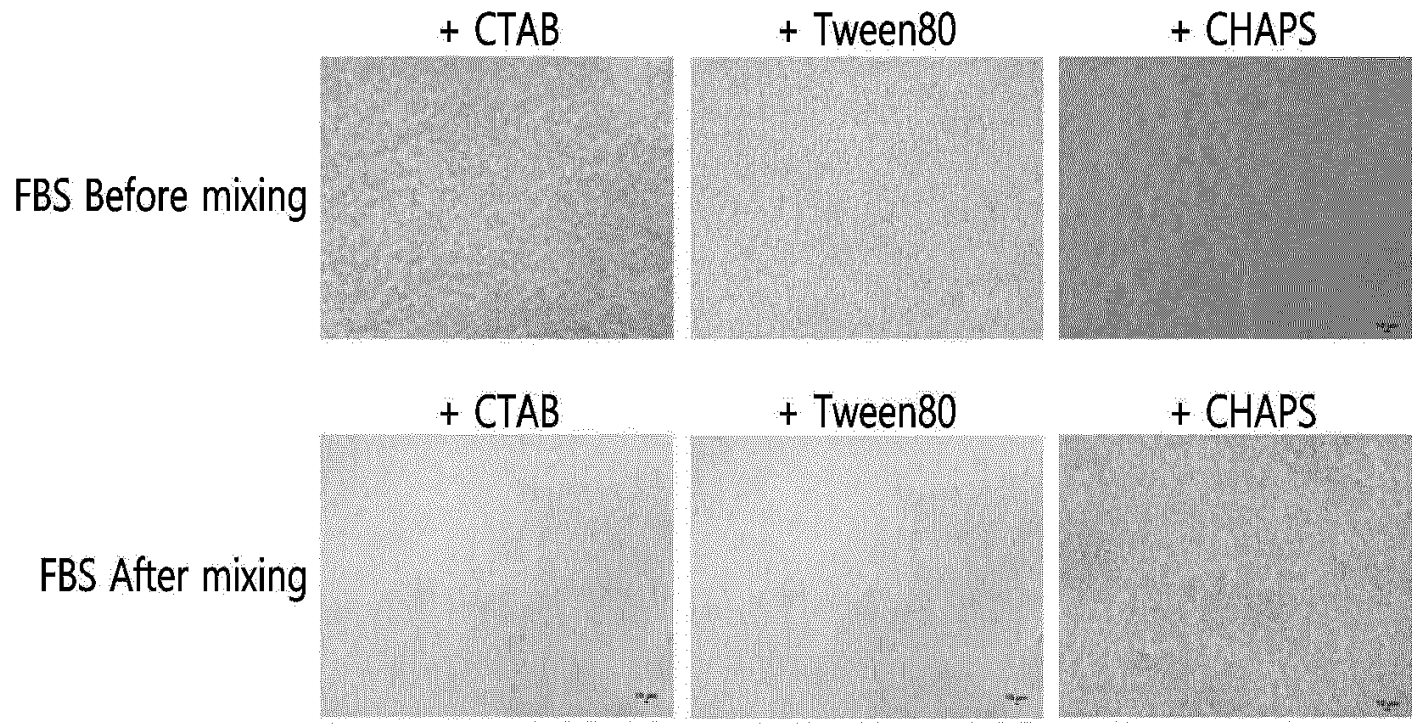
【FIGURES】

【FIG. 1A】

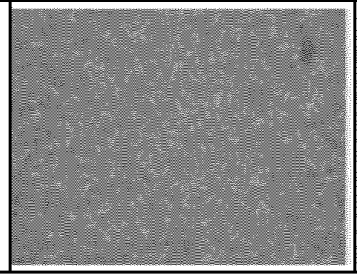
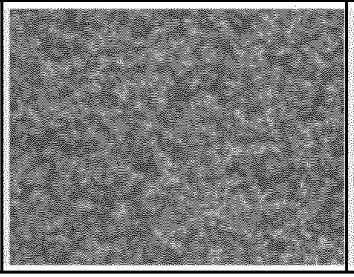
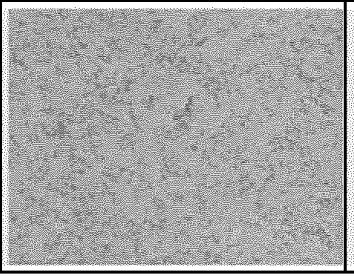
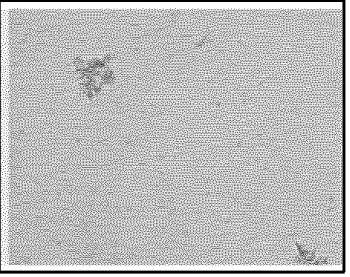
	Nonionic		Zwitterionic	Cationic	Anionic	No surfactant
	+ Tween 80	+ Triton X	+ CHAPS	+ CTAB	+ Sodium deoxycholate	AAV/TA
Number of crystals over size 10um/0.27mm^2	-	-	-	-	12ea	21ea
Average particle size (by DLS)	753 nm	3,445 nm	661 nm	9,657 nm	-	-
Particle formation microscopy images						

【FIG. 1B】



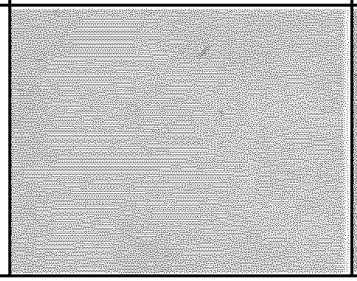
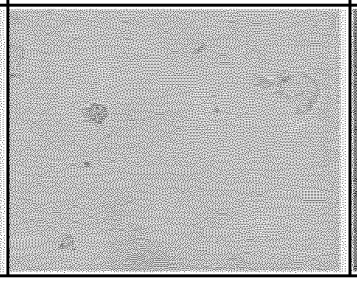
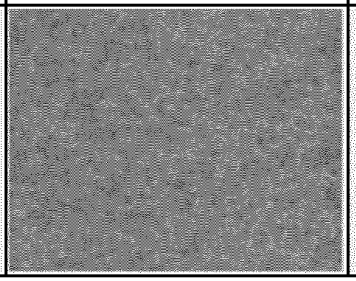
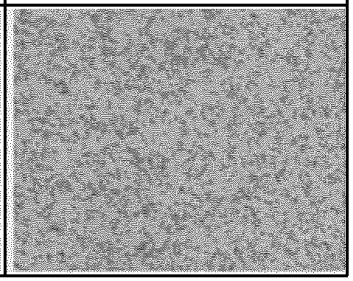
Number of crystals over size 10um/0.27mm²	+ CTAB	+ Tween 80	+ CHAPS
FBS Before mixing	None	None	None
FBS After mixing	None	None	None

【FIG. 2A】

+ Tween 80	0.2%	0.05%	0.0125%	0.003%
Scattering degree(@600nm)	0.833	0.612	0.104	0.048
Number of crystals over size 10um/2.7mm^2	10,000ea>>	None	None	4ea
Particle formation electron microscopy images				

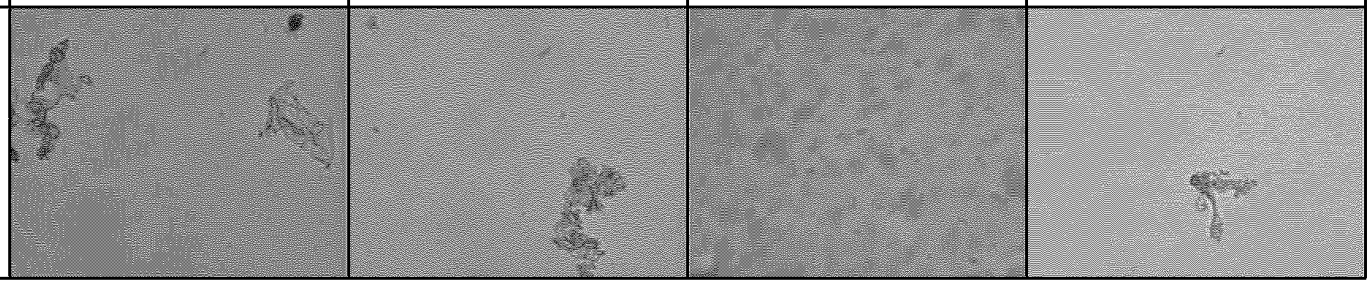
Crystal structure formation | Micro-particulate | Nanoparticulation

【FIG. 2B】

+ Triton X	0.05%	0.0125%	0.003%	0.0008%
Scattering degree(@600nm)	0.032	0.614	0.162	0.050
Number of crystals over size 10um/2.7mm^2	12ea	22ea	None	None
Particle formation electron microscopy images				

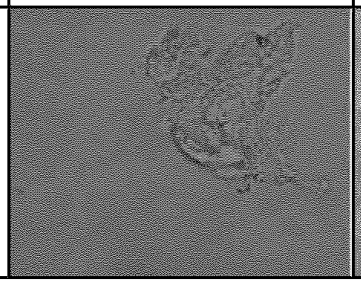
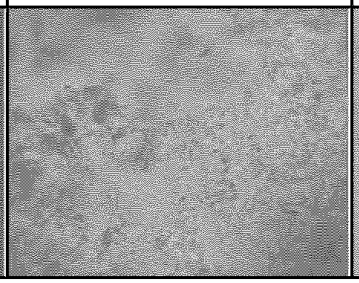
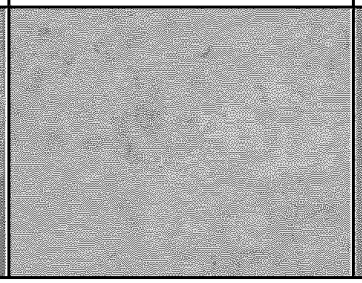
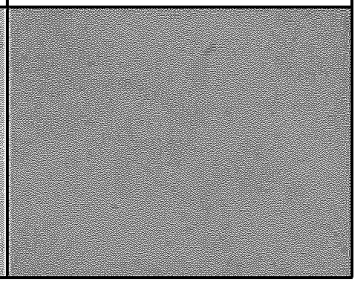
Crystal structure formation | Micro-particulate | Nanoparticulation

【FIG. 2C】

+ CHAPS	0.4%	0.1%	0.025%	0.006%
Scattering degree(@600nm)	0.036	0.042	0.042	0.048
Number of crystals over size 10um/2.7mm²	9ea	7ea	None	2ea
Particle formation electron microscopy images				

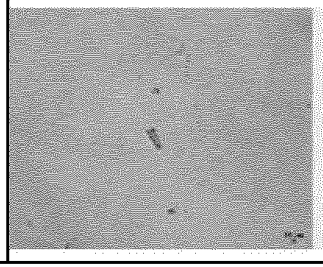
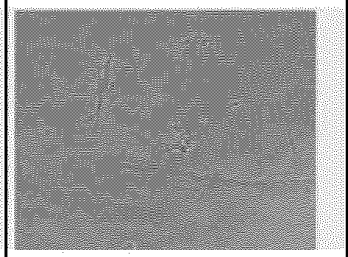
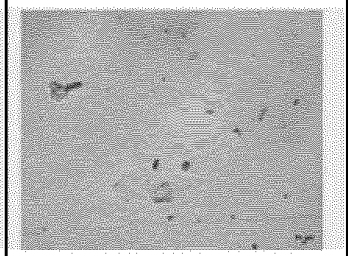
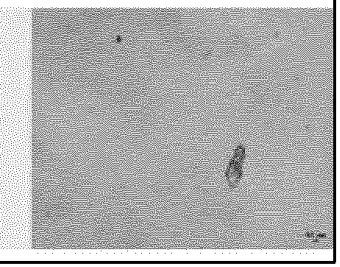
Crystal structure formation | Micro-particulate | Nanoparticulation

【FIG. 2D】

+ CTAB	0.4%	0.1%	0.025%	0.006%
Scattering degree(@600nm)	0.063	0.221	0.086	0.051
Number of crystals over size 10um/2.7mm²	2ea	None	None	1ea
Particle formation electron microscopy images				

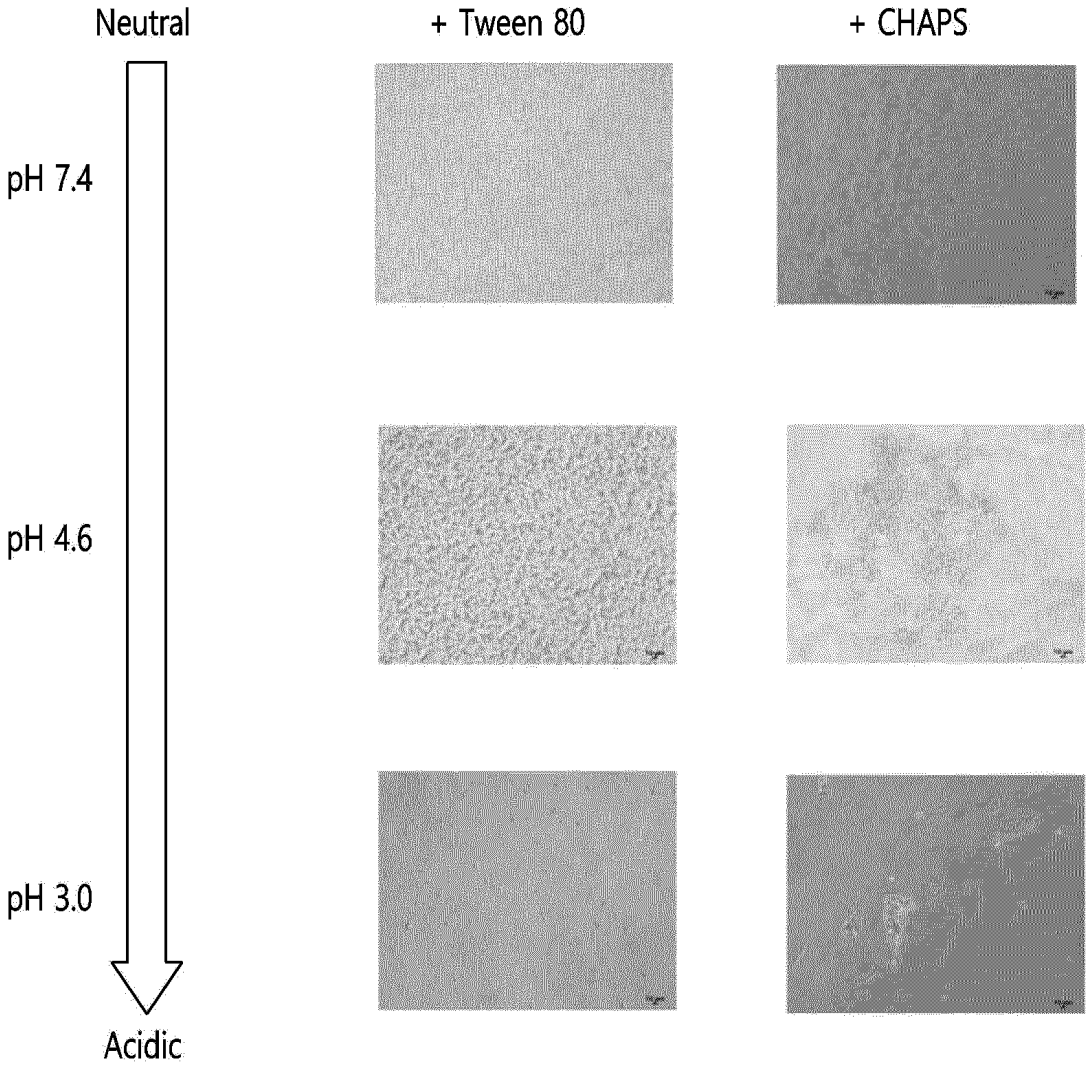
Crystal structure formation | Micro-particulate | Nanoparticulation

【FIG. 2E】

+ Sodium deoxycholate	0.2%	0.05%	0.0125%	0.0003%
Scattering degree(@600nm)	0.036	0.035	0.038	0.035
Number of crystals over size 10um/2.7mm^2	5ea	12ea	20ea	6ea
Particle formation electron microscopy images				

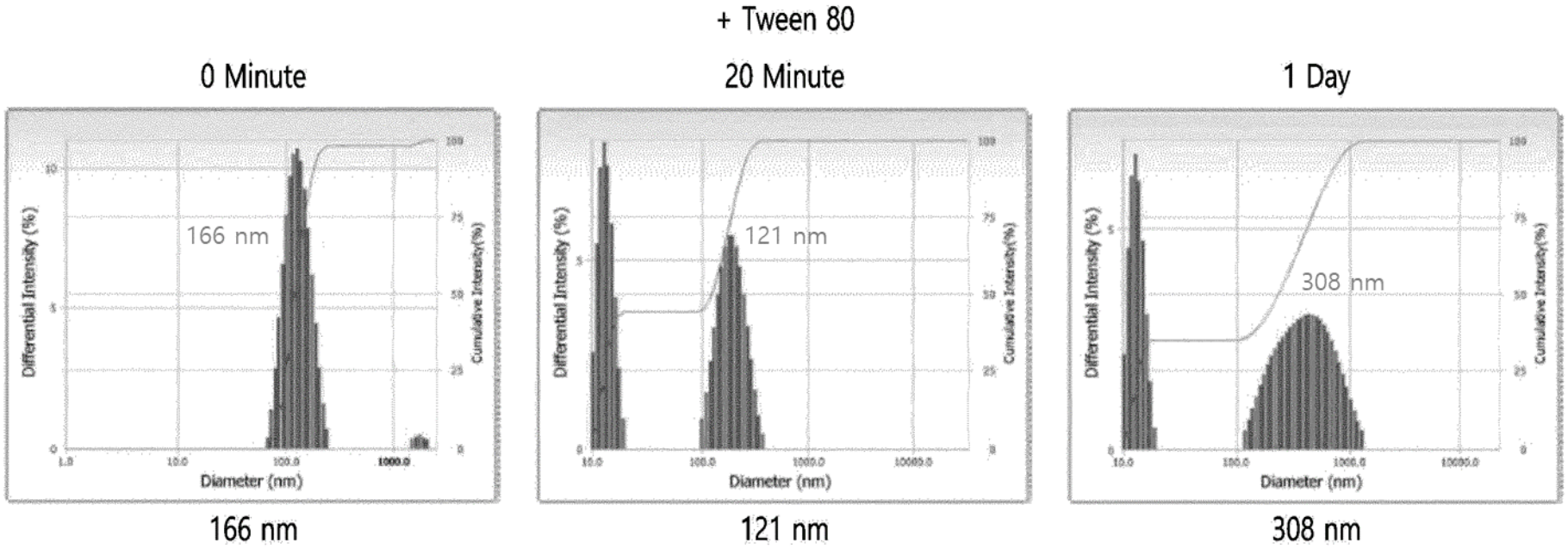
Crystal structure formation | Micro-particulate | Nanoparticulation

【FIG. 3】

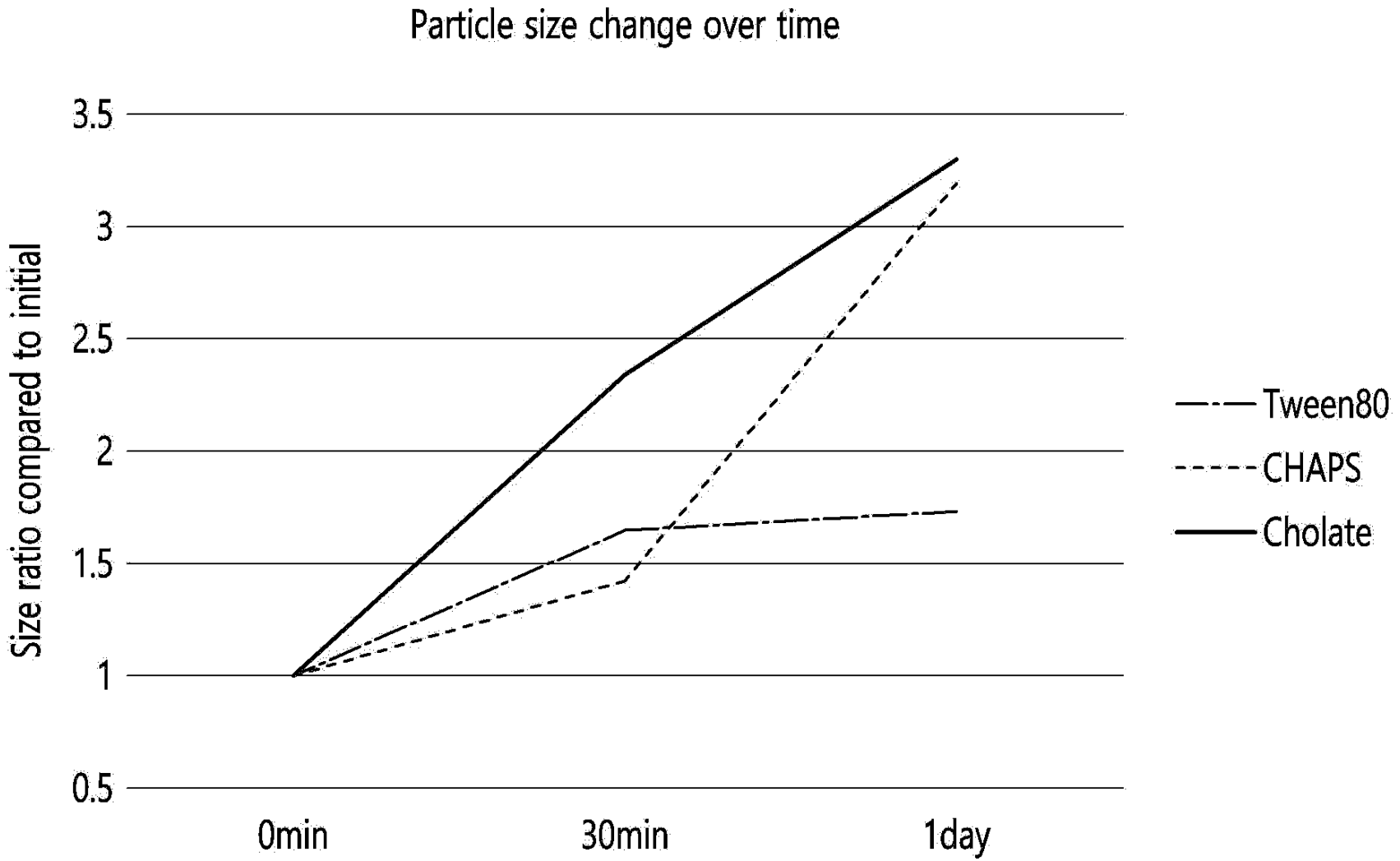


	+ Tween 80	+ CHAPS
pH 7.4	753 nm	661 nm
pH 4.6	564 nm	737 nm
pH 3.0	Number of crystals over size 10um 3ea/2.7mm^2	Number of crystals over size 10um 8ea/2.7mm^2

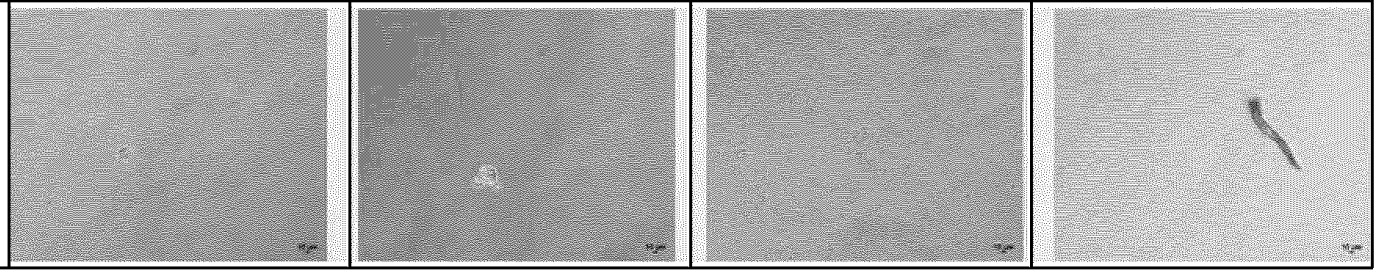
【FIG. 4A】


+ Tween 80
0 Minute
20 Minute
1 Day
166 nm
121 nm
308 nm
Differential Intensity (%)
Cumulative Intensity(%)
Diameter (nm)
166 nm
121 nm
308 nm

【FIG. 4B】

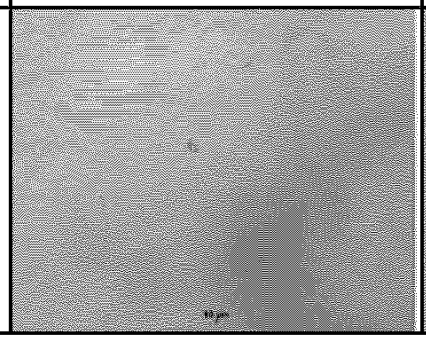

Particle size change over time
Size ratio compared to initial
3.5
3
2.5
2
1.5
1
0.5
0min
30min
1day
Tween80
CHAPS
Cholate

【FIG. 5】

+ Albumin	10%	1%	0.1%	0.01%
Average particle size(by DLS)	–	–	8,591 nm	–
Number of crystals over size 10um/2.7mm²	1ea	1ea	None	1ea
Particle formation electron microscopy images				

Crystal structure formation | Micro-particulate | Nanoparticulation

【FIG. 6】

+ Albumin	+ Tween 80	+ CHAPS	+ CTAB
Average particle size(by DLS)	99 nm	239 nm	40 nm
Number of crystals over size 10um/2.7mm^2	None	None	None
Particle formation electron microscopy images			

Crystal structure formation

Micro-particulate

Nanoparticulation

【FIG. 7】

Gold nanoparticle	Tween 80+GNP	CHAPS+GNP	CTAB+GNP	Gold only
Number of crystals over size 10um/2.7mm^2	Multiplicity	Multiplicity	Multiplicity	Multiplicity
Particle formation electron microscopy images	