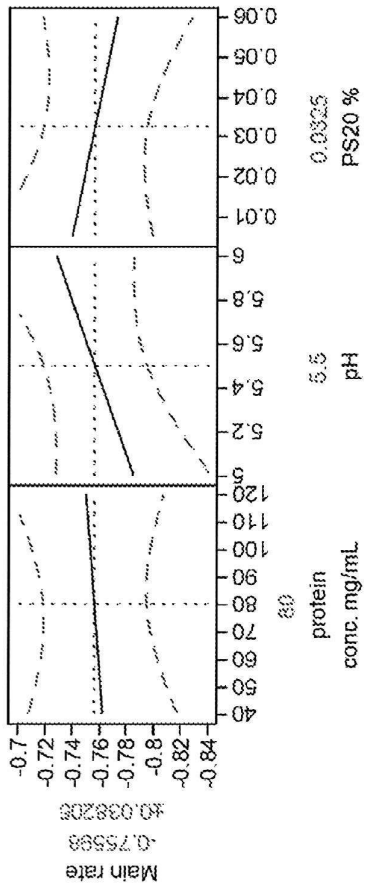

Main rate
-0.75599
±0.038208
-0.7
-0.72
-0.74
-0.76
-0.78
-0.8
-0.82
-0.84
40
50
60
70
80
90
100
110
120
protein
conc. mg/mL
5
5.2
5.4
5.6
5.8
6
5.5
pH
0.01
0.02
0.03
0.04
0.05
0.06
0.0325
PS20 %

FIG. 1A


protein conc. mg/mL
pH
PS20 %
Main rate
protein
conc. mg/mL
120
40
6
5
0.005
0.06
0.08
0.005
PS20 %

FIG. 1B

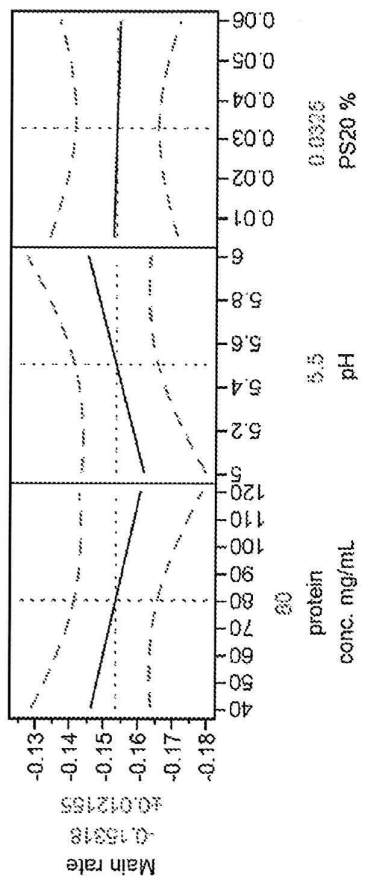

Main rate
-0.15318
+0.012155
-0.13
-0.14
-0.15
-0.16
-0.17
-0.18
40
50
60
70
80
90
100
110
120
protein
conc. mg/mL
5
5.2
5.4
5.6
5.8
6
pH
0.01
0.02
0.03
0.04
0.05
0.06
PS20 %

FIG. 2A


protein conc. mg/mL
pH
PS20 %
Main rate
protein
conc. mg/mL
40
120
6
5
0.005
0.06

FIG. 2B

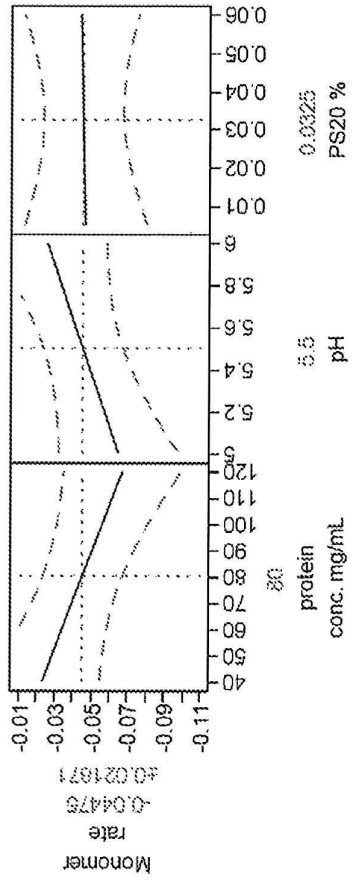

Monomer rate
-0.01
-0.03
-0.05
-0.07
-0.09
-0.11
40
50
60
70
80
90
100
110
120
protein conc. mg/mL
5
5.2
5.4
5.6
5.8
6
pH
0.01
0.02
0.03
0.04
0.05
0.06
PS20 %

FIG. 3A

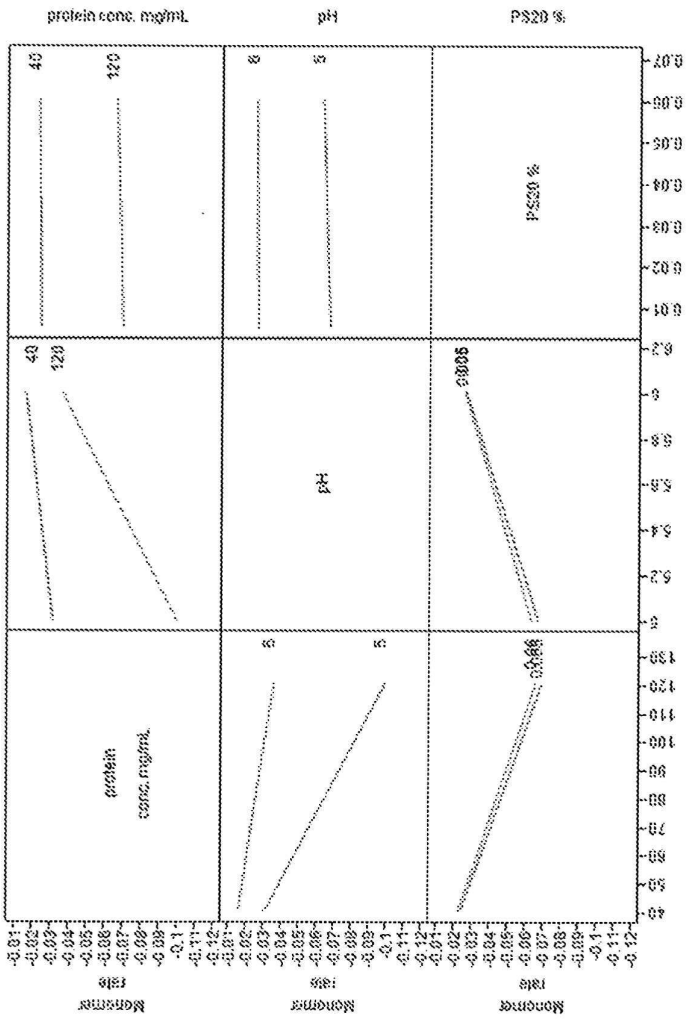

protein conc. mg/mL
pH
PS20 %
Monomer rate
Monomer rate
Monomer rate

FIG. 3B

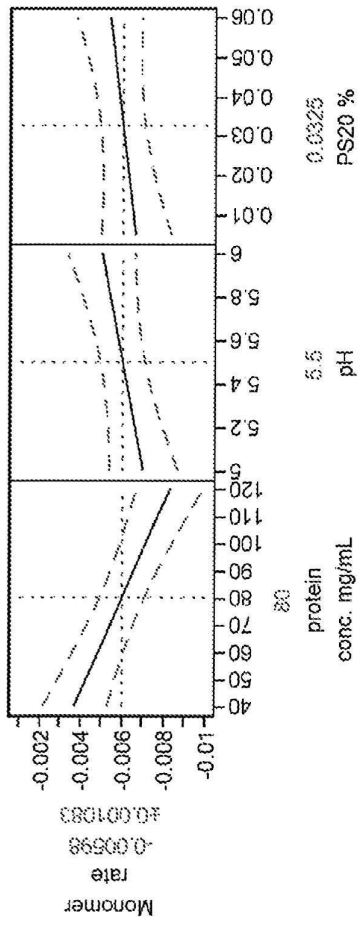

Monomer rate
-0.00598
+0.001083
-0.002
-0.004
-0.006
-0.008
-0.01
40
50
60
70
80
90
100
110
120
protein conc. mg/mL
5
5.2
5.4
5.6
5.8
6
pH
0.01
0.02
0.03
0.04
0.05
0.06
0.0325
PS20 %

FIG. 4A

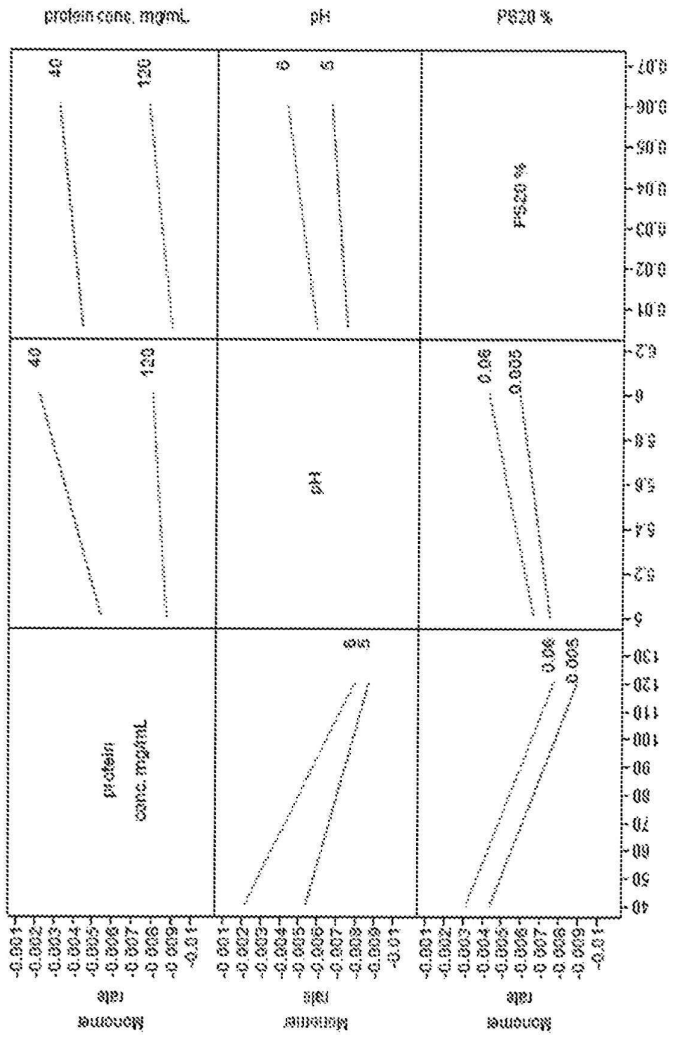

protein conc. mg/mL
pH
PS20 %
40
120
6
5
0.06
0.005
Monomer rate
Monomer rate
Monomer rate

FIG. 4B

FIG. 5

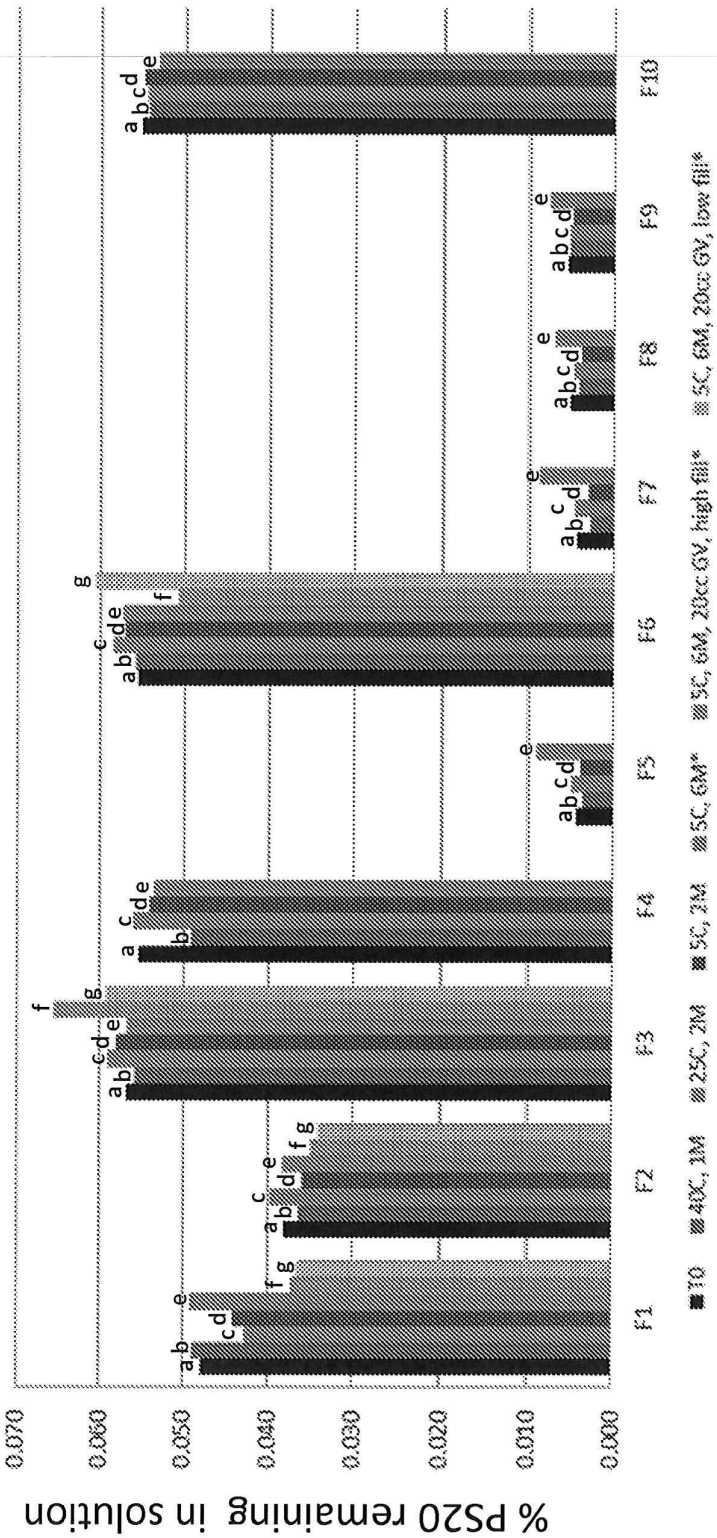

% PS20 remaining in solution
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
10
40C, 1M
25C, 2M
5C, 2M
5C, 6M*
5C, 6M, 20cc GV, high fill*
5C, 6M, 20cc GV, low fill*

FIG. 6A

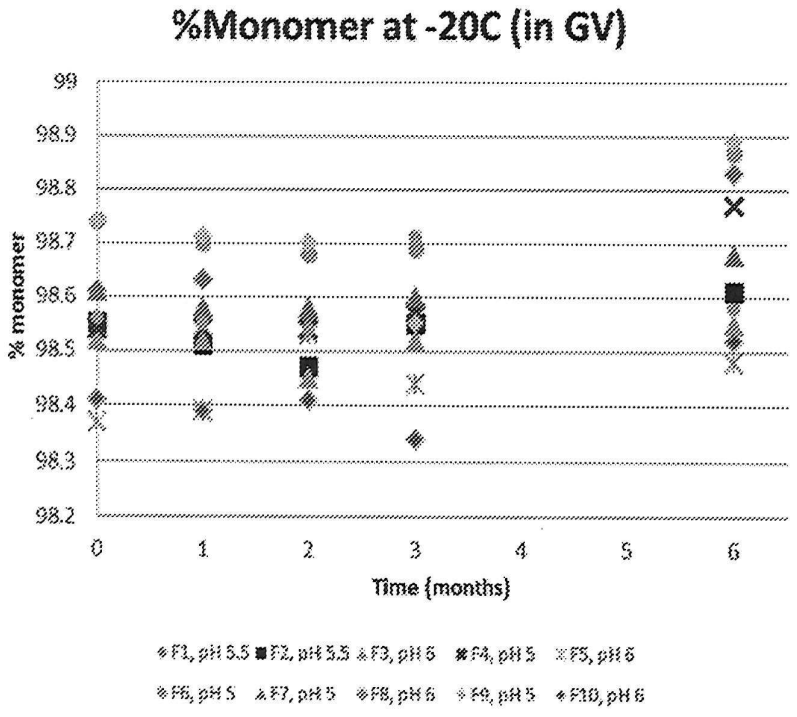

%Monomer at -20C (in GV)
% monomer
99
98.9
98.8
98.7
98.6
98.5
98.4
98.3
98.2
0
1
2
3
4
5
6
Time (months)
F1, pH 5.5 F2, pH 5.5 F3, pH 6 F4, pH 5 F5, pH 6
F6, pH 5 F7, pH 5 F8, pH 6 F9, pH 5 F10, pH 6

FIG. 6B

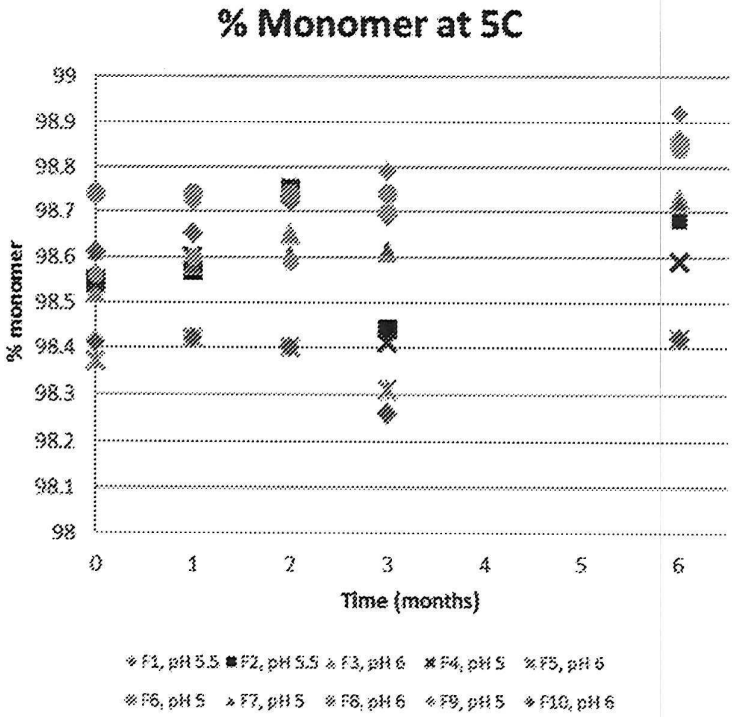

% Monomer at 5C
% monomer
99
98.9
98.8
98.7
98.6
98.5
98.4
98.3
98.2
98.1
98
0
1
2
3
4
5
6
Time (months)
F1, pH 5.5 F2, pH 5.5 F3, pH 6 F4, pH 5 F5, pH 6
F6, pH 5 F7, pH 5 F8, pH 6 F9, pH 5 F10, pH 6

FIG. 6C

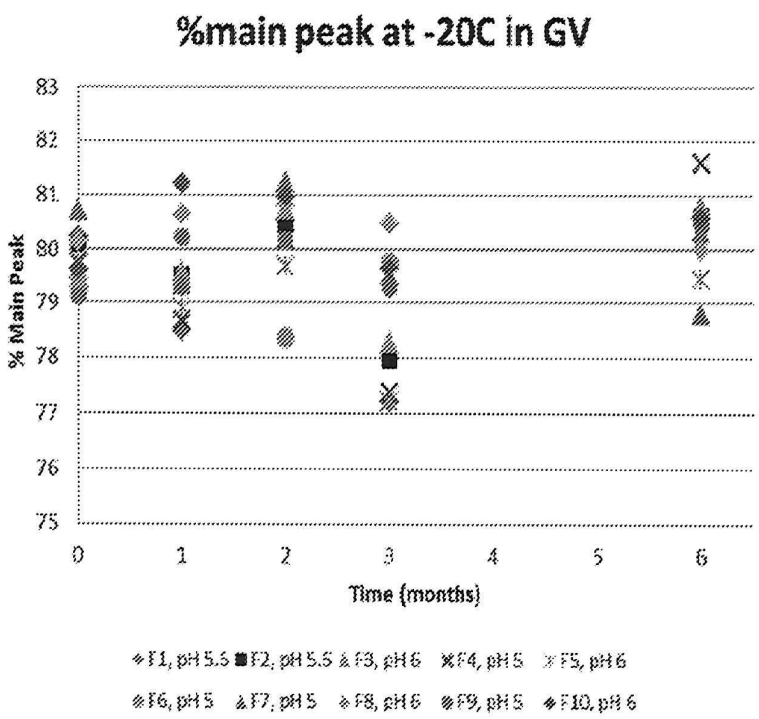

%main peak at -20C in GV
% Main Peak
Time (months)
F1, pH 5.5
F2, pH 5.5
F3, pH 6
F4, pH 5
F5, pH 6
F6, pH 5
F7, pH 5
F8, pH 6
F9, pH 5
F10, pH 6

FIG. 6D

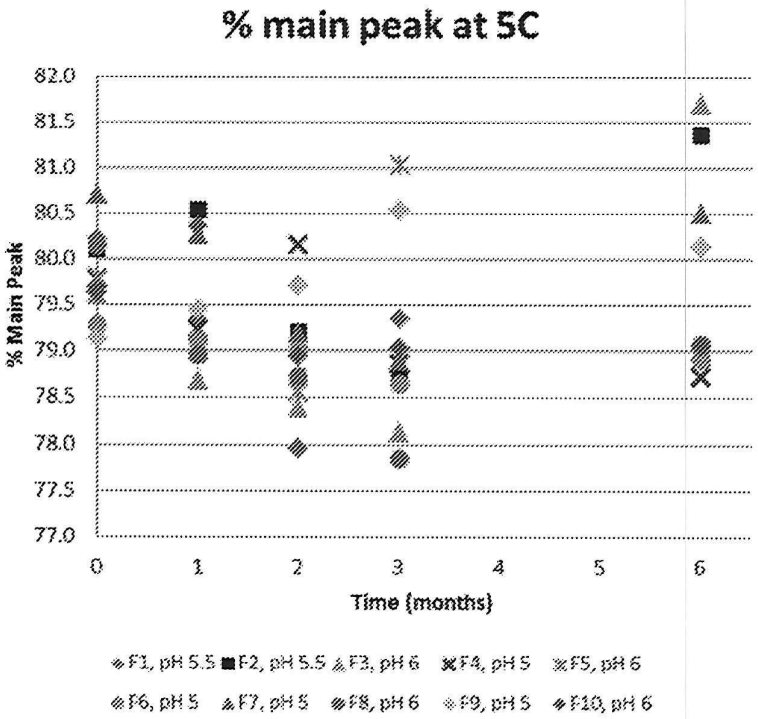

% main peak at 5C
% Main Peak
Time (months)
F1, pH 5.5
F2, pH 5.5
F3, pH 6
F4, pH 5
F5, pH 6
F6, pH 5
F7, pH 5
F8, pH 6
F9, pH 5
F10, pH 6

FIG. 7A

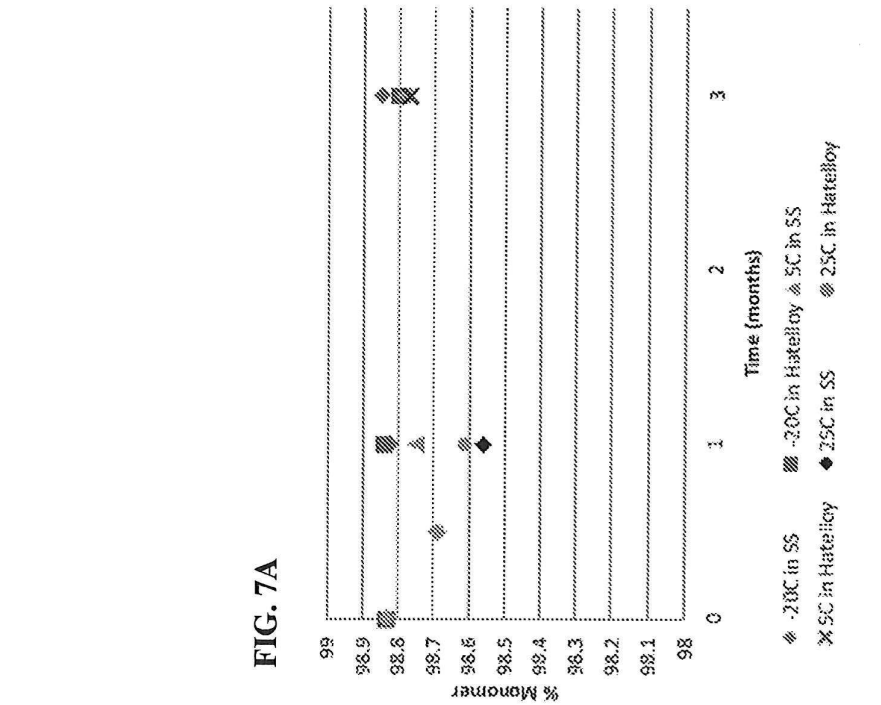
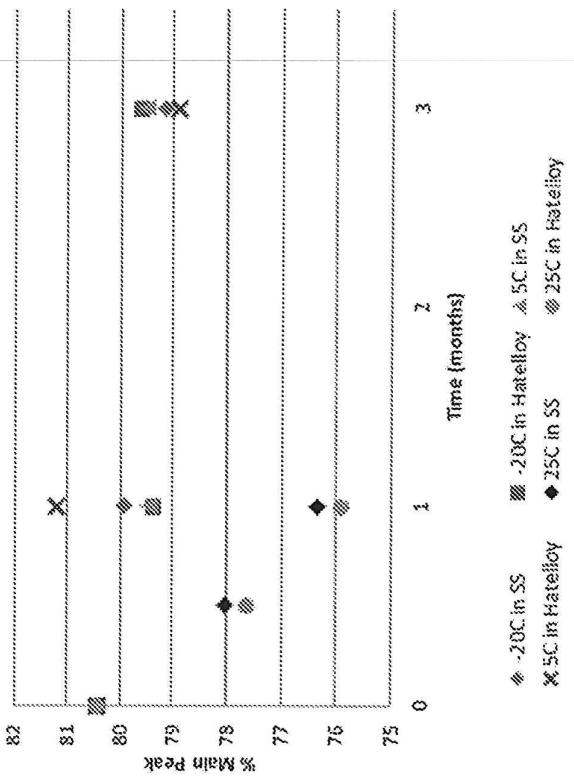

99
98.9
98.8
98.7
98.6
98.5
98.4
98.3
98.2
98.1
98
% Monomer
0
1
2
3
Time (months)
-20C in SS
-20C in Hatelloy
5C in SS
5C in Hatelloy
25C in SS
25C in Hatelloy

FIG. 7B


82
81
80
79
78
77
76
75
% Main Peak
0
1
2
3
Time (months)
-20C in SS
-20C in Hatelloy
5C in SS
5C in Hatelloy
25C in SS
25C in Hatelloy

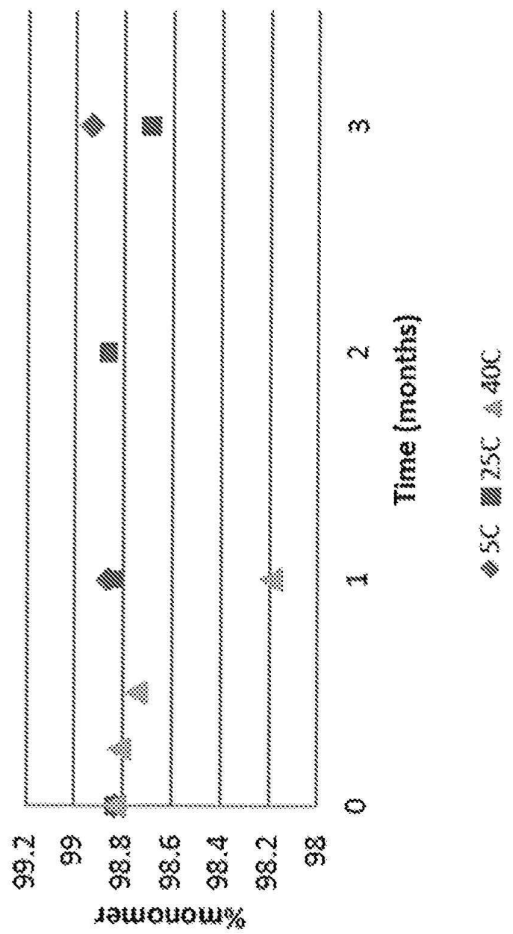

99.2
99
98.8
98.6
98.4
98.2
98
%monomer
0
1
2
3
Time (months)
5C
25C
40C

FIG. 8A

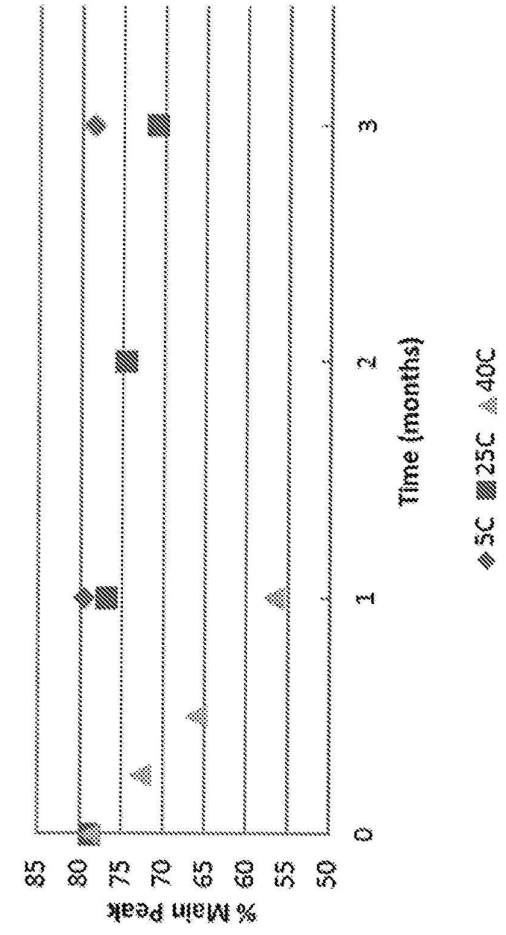

85
80
75
70
65
60
55
50
% Main Peak
0
1
2
3
Time (months)
5C
25C
40C

FIG. 8B

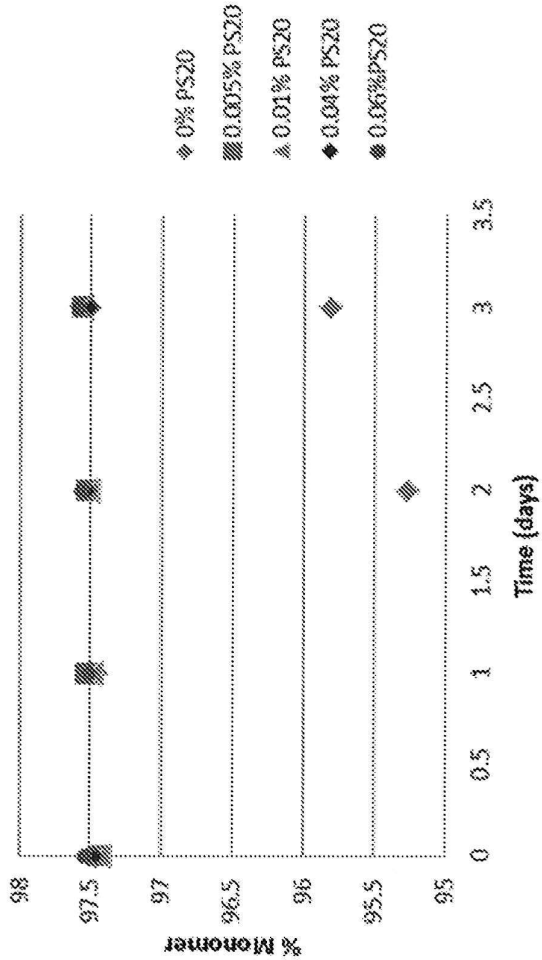

% Monomer
98
97.5
97
96.5
96
95.5
95
0
0.5
1
1.5
2
2.5
3
3.3
Time (days)
0% PS20
0.005% PS20
0.01% PS20
0.04% PS20
0.06%PS20

FIG. 9A

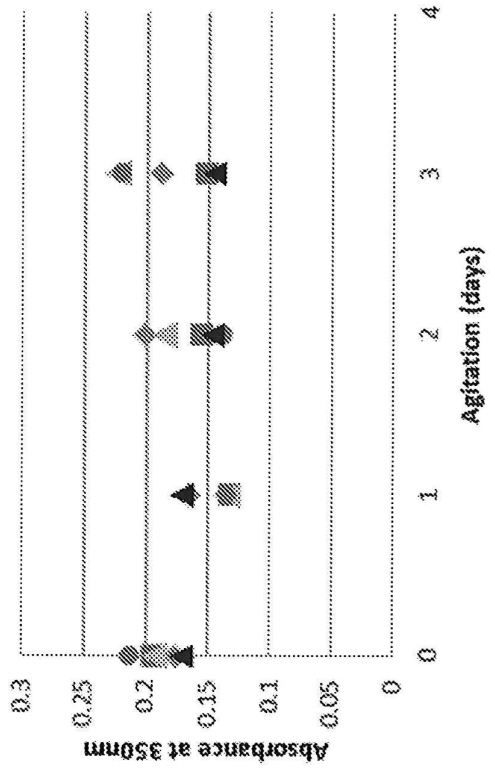

Absorbance at 350nm
0.3
0.25
0.2
0.15
0.1
0.05
0
0
1
2
3
4
Agitation (days)
0%
0.005%
0.01%
0.04%
0.06%

FIG. 9B

FIG. 10

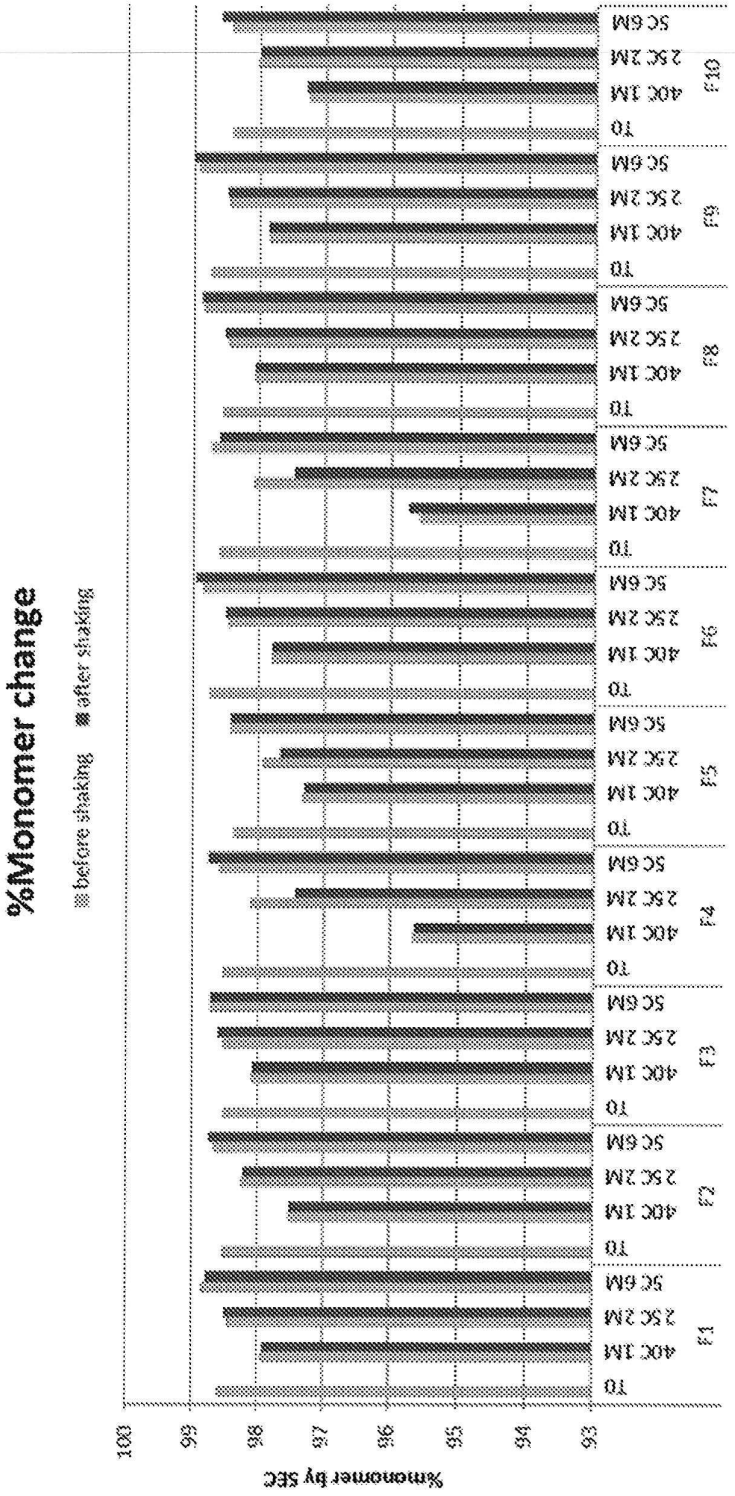

%Monomer change
before shaking
after shaking
%monomer by SEC
100
99
98
97
96
95
94
93
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
T0
40C 1M
25C 2M
5C 6M

FIG. 11A

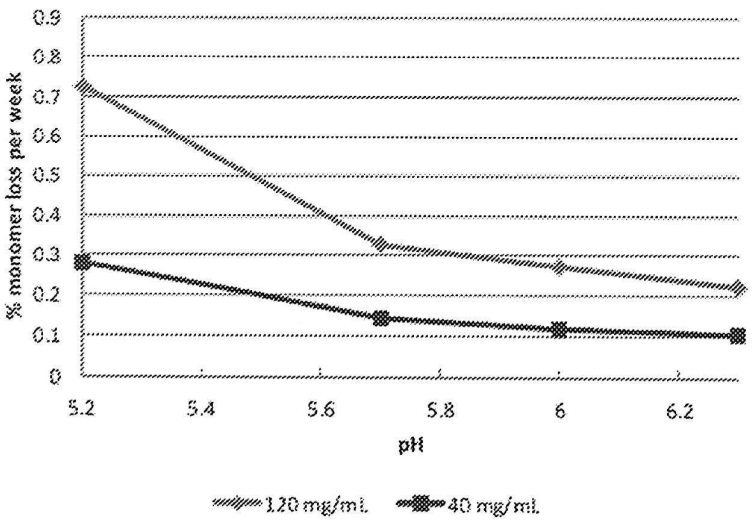



FIG. 11B

