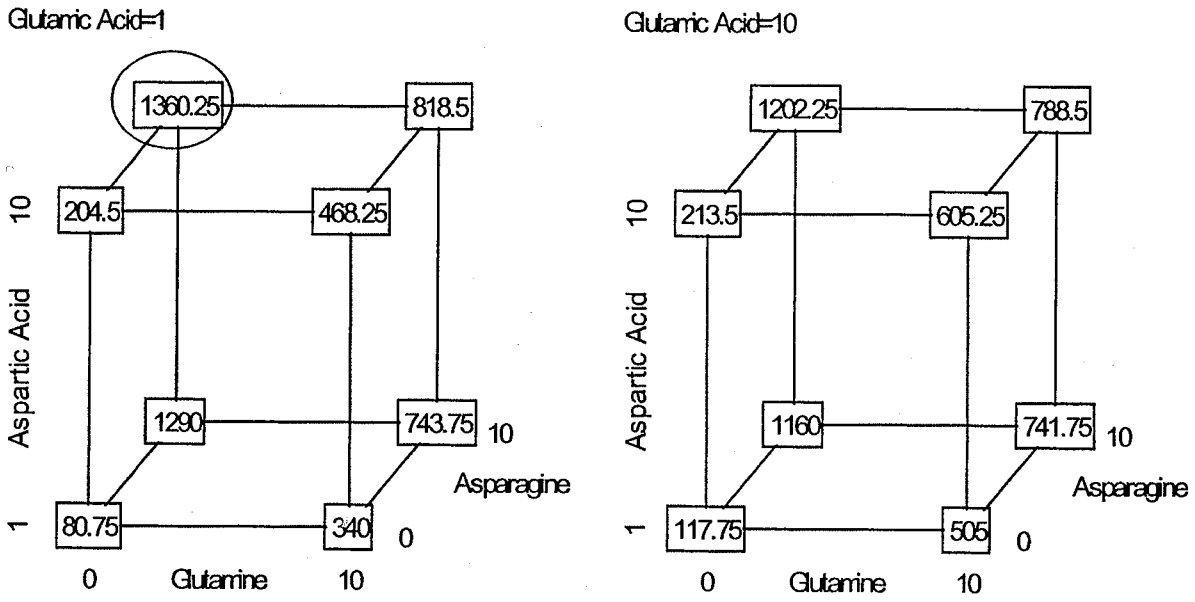

Glutamic Acid=1
1360.25
818.5
204.5
468.25
1290
743.75
80.75
340
Aspartic Acid
10
1
0
Glutamine
10
Asparagine
10
0
Glutamic Acid=10
1202.25
788.5
213.5
605.25
1160
741.75
117.75
505
Aspartic Acid
10
1
0
Glutamine
10
Asparagine
10
0

Figure 1.

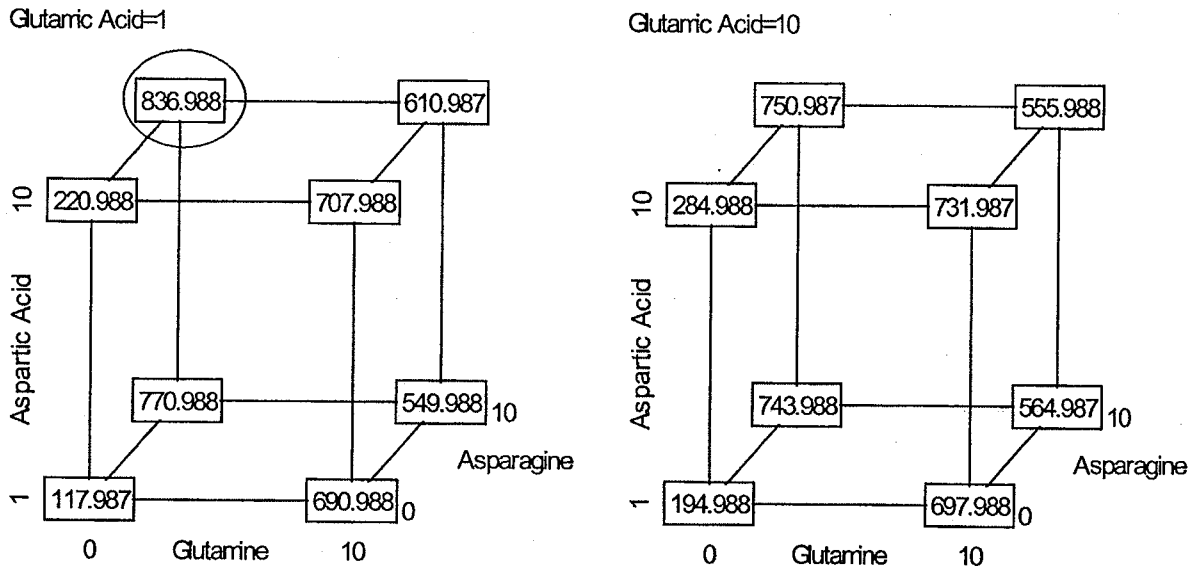

Glutamic Acid=1
836.988
610.987
220.988
707.988
770.988
549.988
117.987
690.988
Aspartic Acid
10
1
0
Glutamine
10
Asparagine
10
0
Glutamic Acid=10
750.987
555.988
284.988
731.987
743.988
564.987
194.988
697.988
Aspartic Acid
10
1
0
Glutamine
10
Asparagine
10
0

Figure 2.

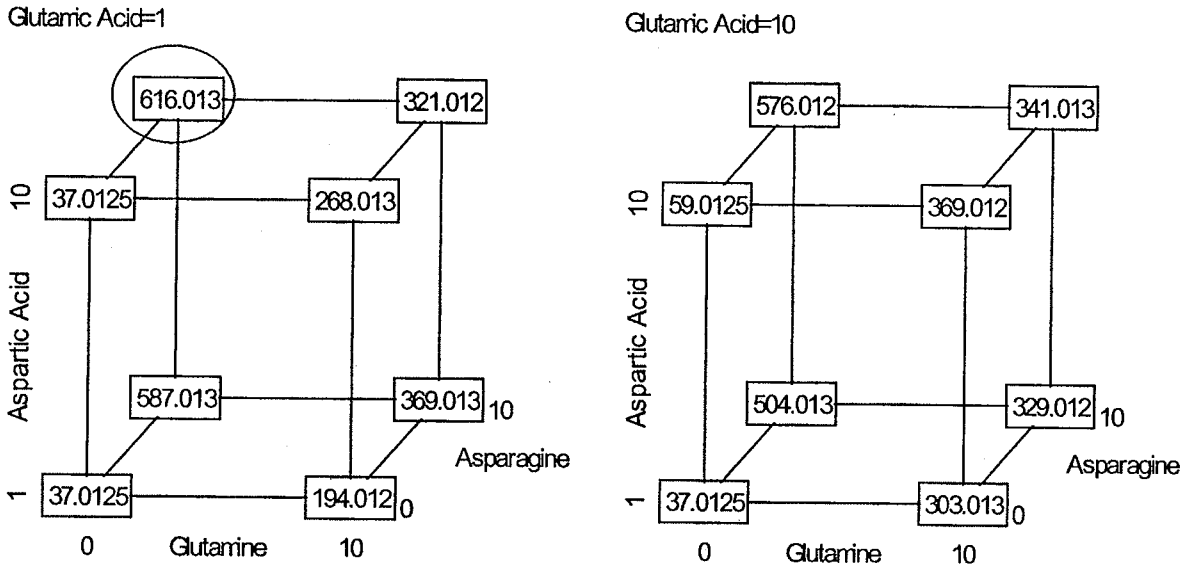

Glutamic Acid=1
616.013
321.012
37.0125
268.013
587.013
369.013
37.0125
194.012
Aspartic Acid
10
1
0
Glutamine
10
Asparagine
10
0
Glutamic Acid=10
576.012
341.013
59.0125
369.012
504.013
329.012
37.0125
303.013
Aspartic Acid
10
1
0
Glutamine
10
Asparagine
10
0

Figure 3.

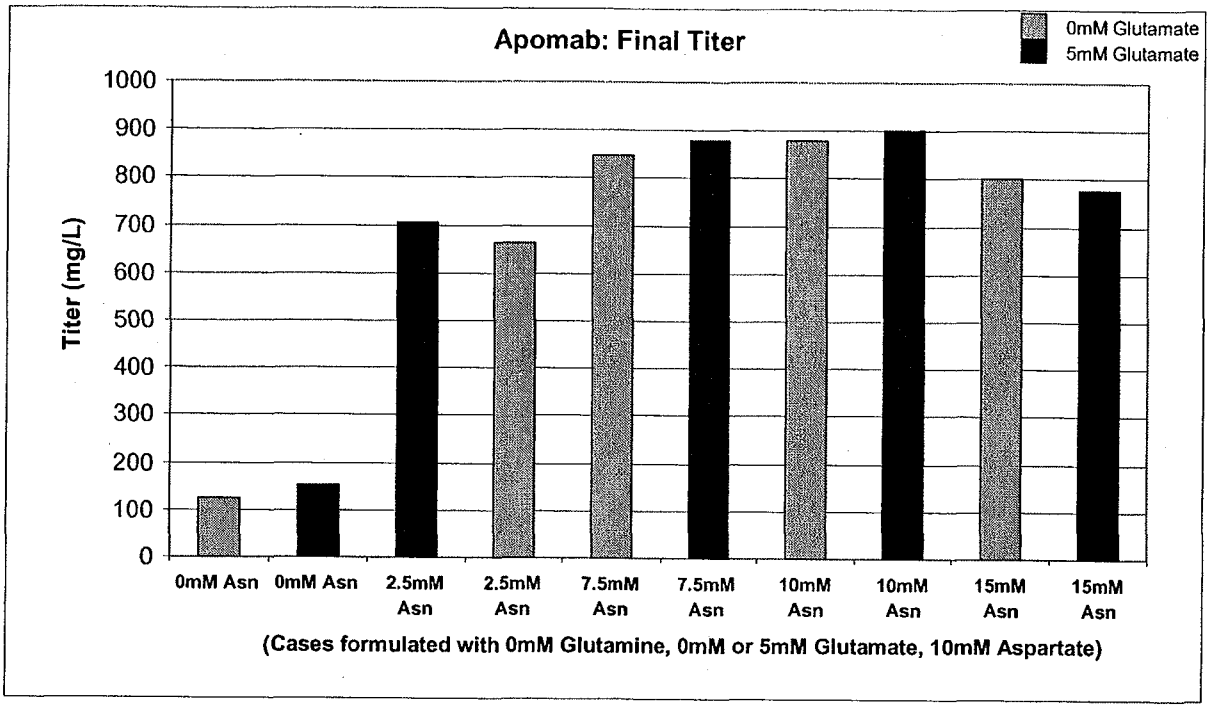
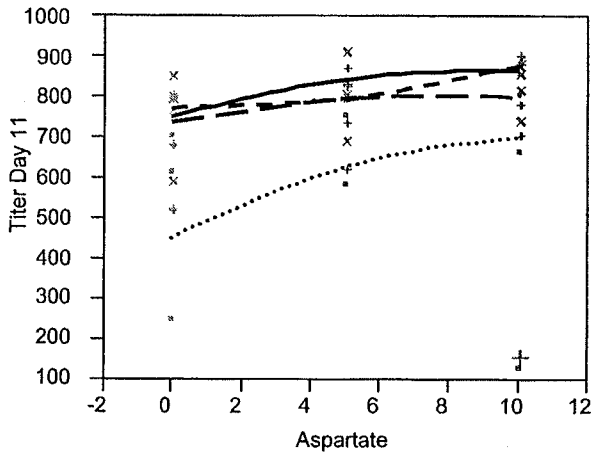

Apomab: Final Titer
0mM Glutamate
5mM Glutamate
Titer (mg/L)
1000
900
800
700
600
500
400
300
200
100
0
0mM Asn
0mM Asn
2.5mM Asn
2.5mM Asn
7.5mM Asn
7.5mM Asn
10mM Asn
10mM Asn
15mM Asn
15mM Asn
(Cases formulated with 0mM Glutamine, 0mM or 5mM Glutamate, 10mM Aspartate)

Figure 4.

Bivariate Fit of Titer Day 11 By Aspartate Glutamine=0



····· Smoothing Spline Fit, lambda=1 Asparagine==2.5
—— Smoothing Spline Fit, lambda=1 Asparagine==7.5
– – Smoothing Spline Fit, lambda=1 Asparagine==10
— · Smoothing Spline Fit, lambda=1 Asparagine==15

Smoothing Spline Fit, lambda=1 Asparagine==2.5

R-Square	0.573894
Sum of Squares Error	73461.63

Smoothing Spline Fit, lambda=1 Asparagine==7.5

R-Square	0.65596
Sum of Squares Error	11556.31

Smoothing Spline Fit, lambda=1 Asparagine==10

R-Square	0.408718
Sum of Squares Error	25684.65

Smoothing Spline Fit, lambda=1 Asparagine==15

R-Square	0.220438
Sum of Squares Error	26400.64

Figure 5.

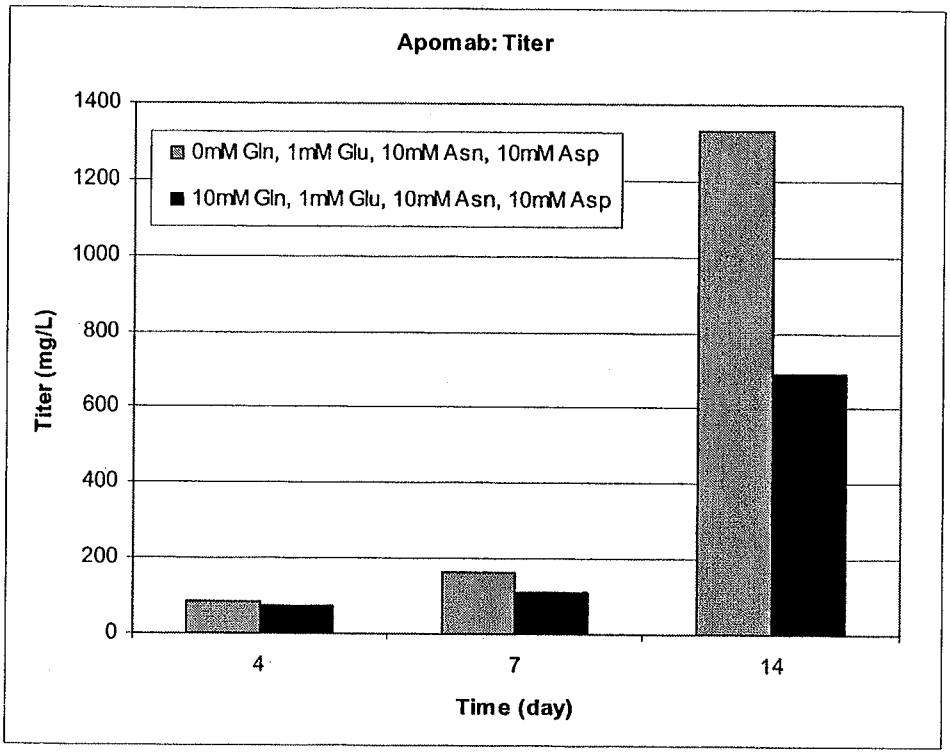

Apomab: Titer
1400
1200
1000
800
600
400
200
0
Titer (mg/L)
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
4
7
14
Time (day)

Figure 6A

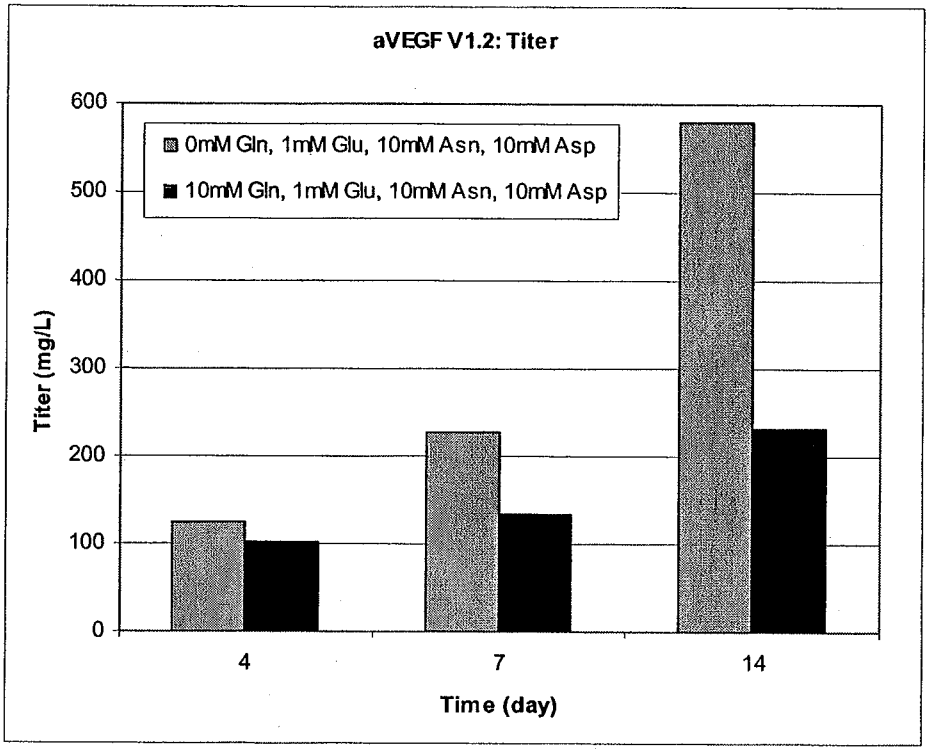

aVEGF V1.2: Titer
600
500
400
300
200
100
0
Titer (mg/L)
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
4
7
14
Time (day)

Figure 6B

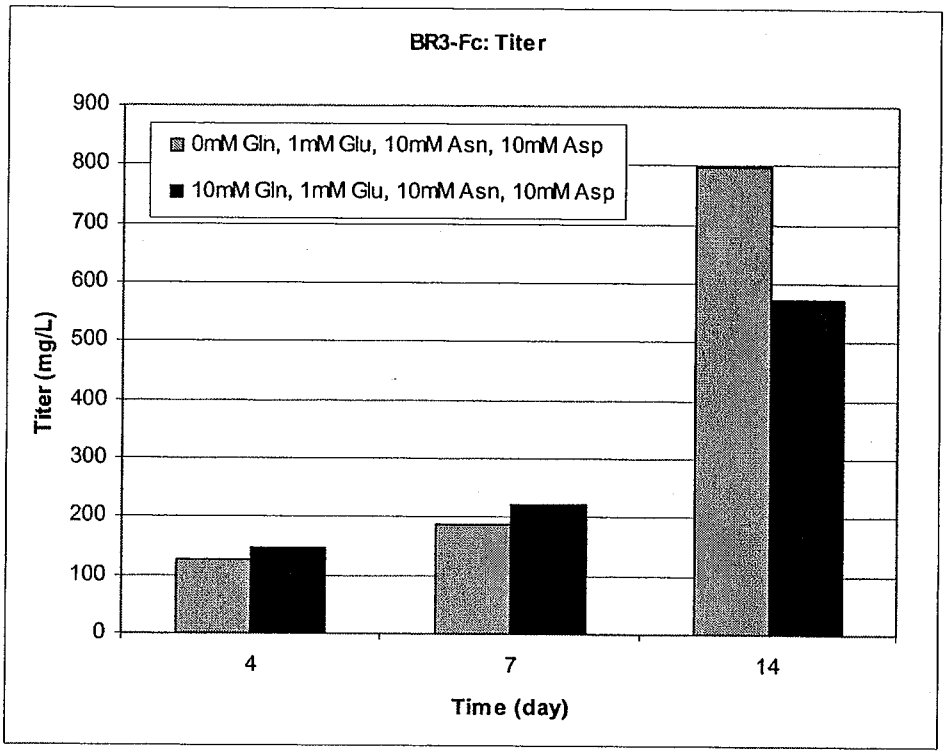

BR3-Fc: Titer
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
Titer (mg/L)
900
800
700
600
500
400
300
200
100
0
4
7
14
Time (day)

Figure 6C

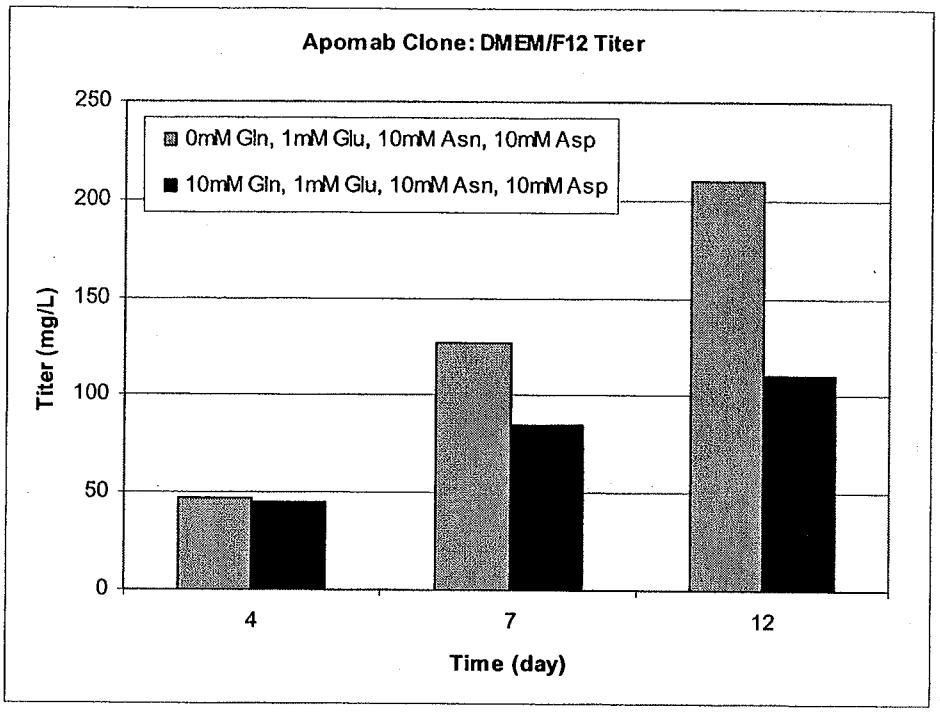

Apomab Clone: DMEM/F12 Titer
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
Titer (mg/L)
250
200
150
100
50
0
4
7
12
Time (day)

Figure 7A

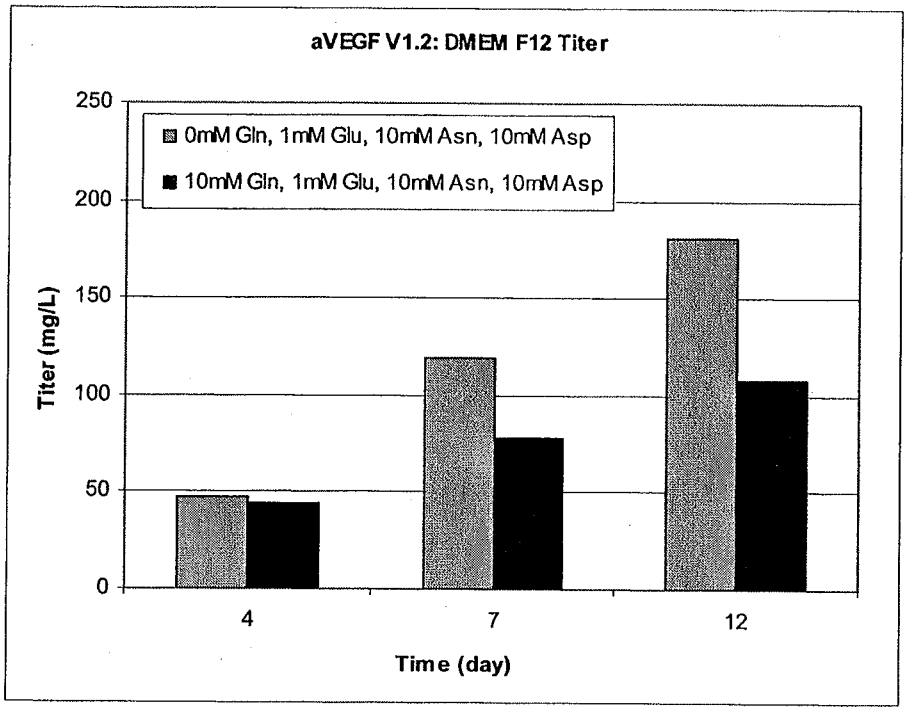

aVEGF V1.2: DMEM F12 Titer
250
200
150
100
50
0
Titer (mg/L)
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
4
7
12
Time (day)

Figure 7B

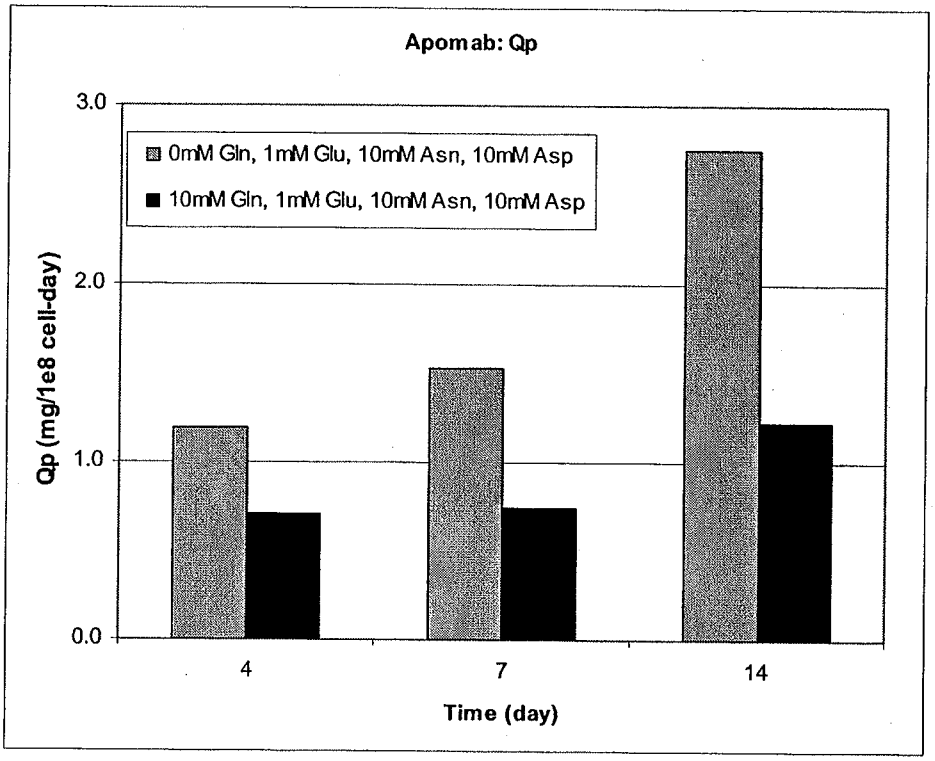

Apomab: Qp
3.0
2.0
1.0
0.0
Qp (mg/1e8 cell-day)
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
4
7
14
Time (day)

Figure 8A

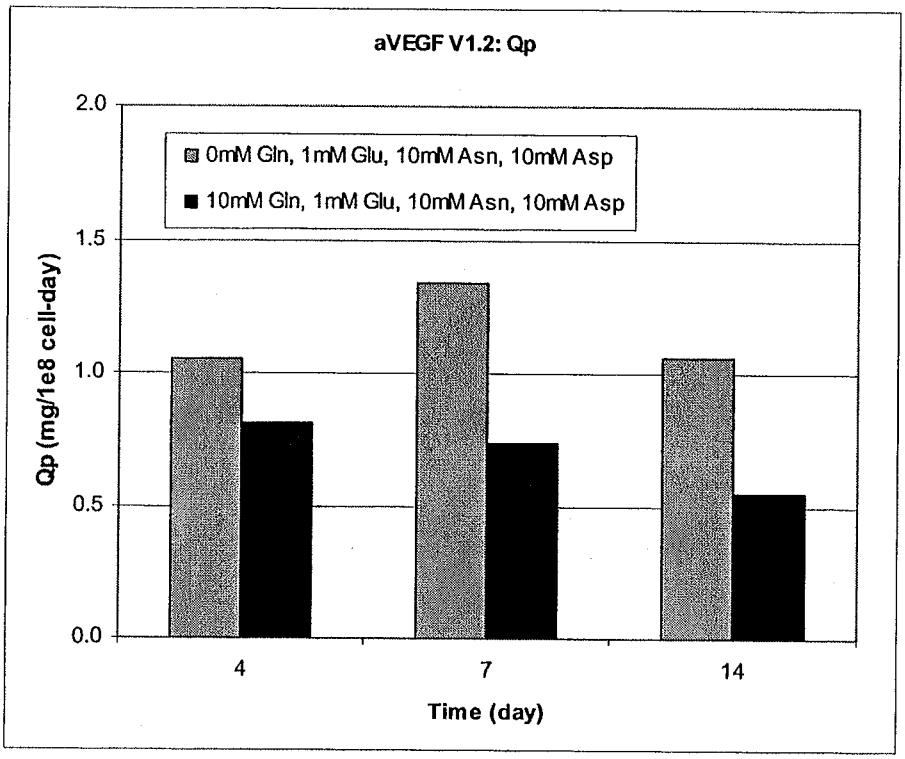

aVEGF V1.2: Qp
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
Qp (mg/1e8 cell-day)
2.0
1.5
1.0
0.5
0.0
4
7
14
Time (day)

Figure 8B

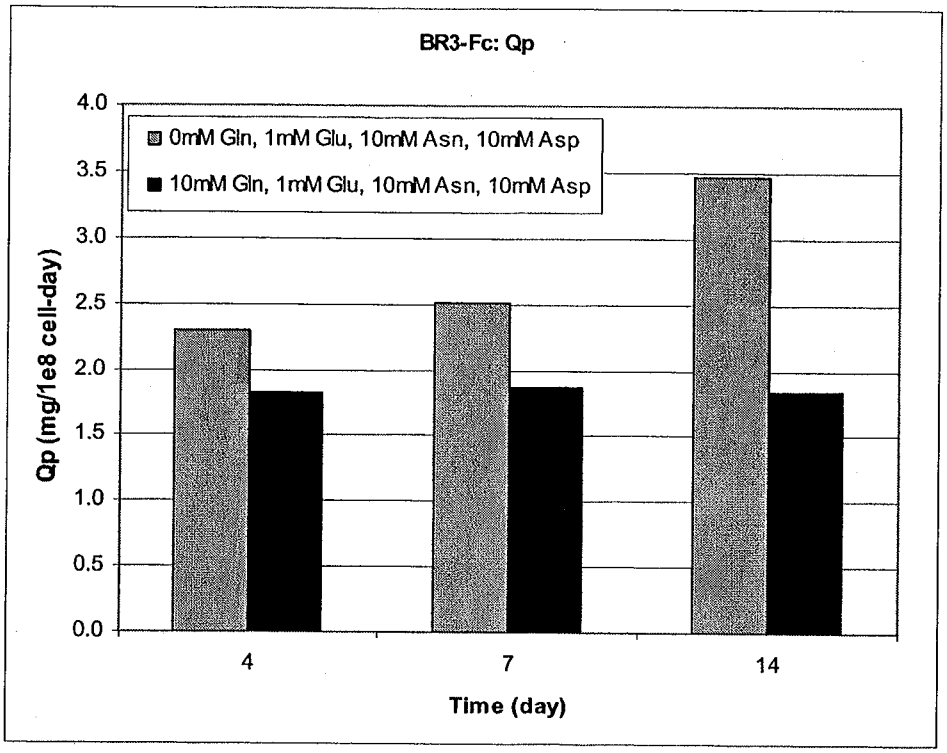

BR3-Fc: Qp
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
Qp (mg/1e8 cell-day)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4
7
14
Time (day)

Figure 8C

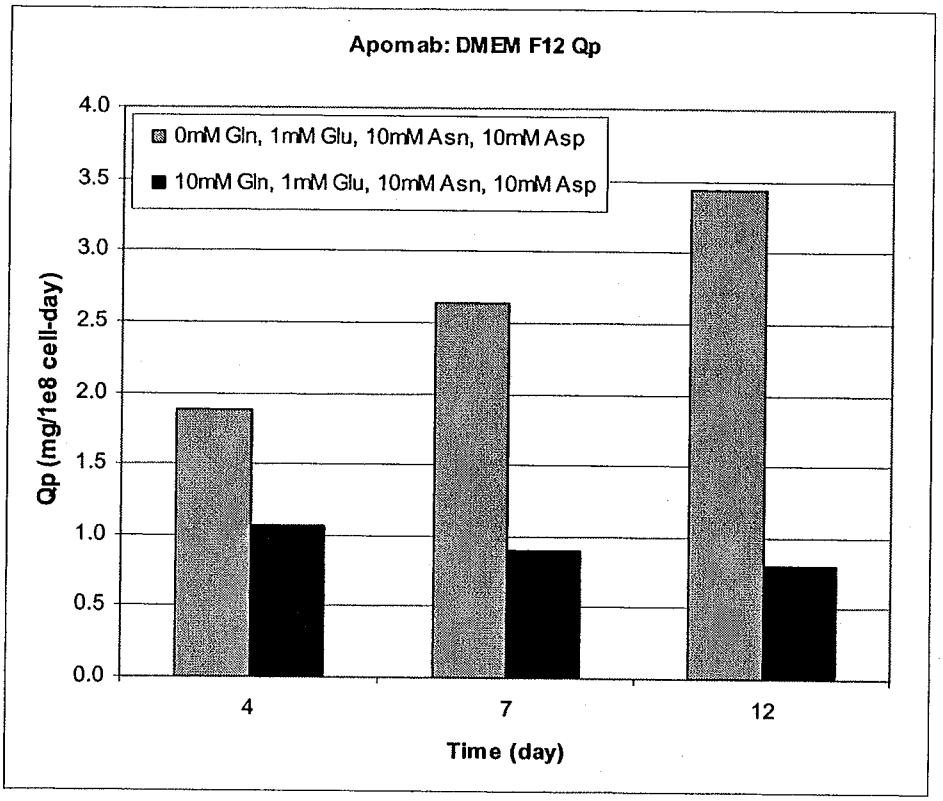

Apomab: DMEM F12 Qp
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
Qp (mg/1e8 cell-day)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4
7
12
Time (day)

Figure 9A

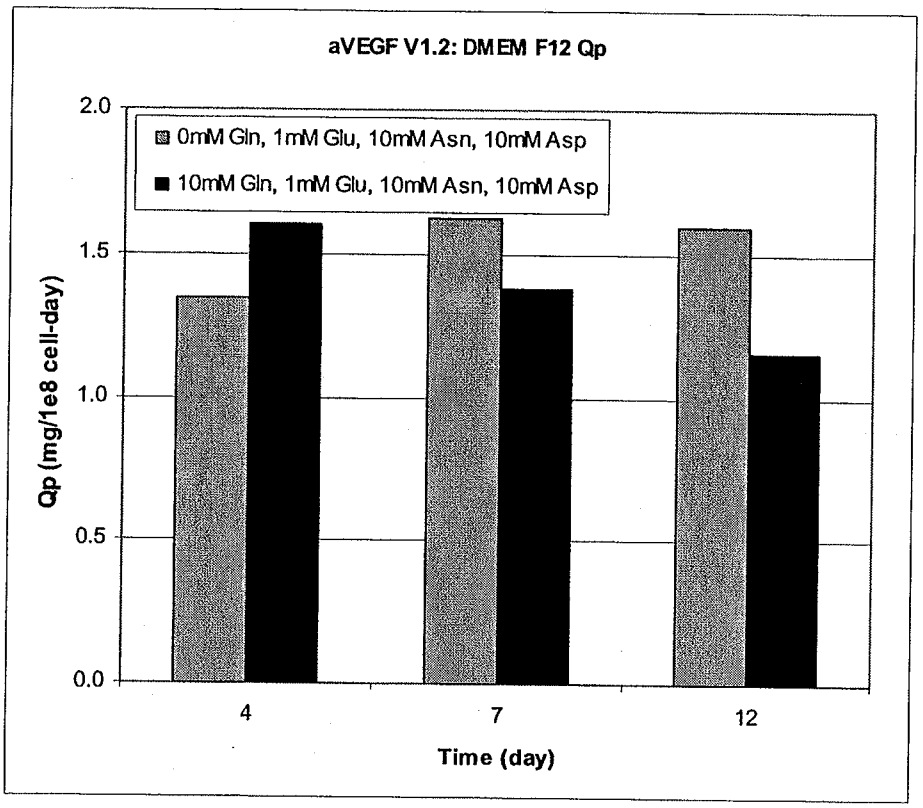

aVEGF V1.2: DMEM F12 Qp
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
Qp (mg/1e8 cell-day)
2.0
1.5
1.0
0.5
0.0
4
7
12
Time (day)

Figure 9B

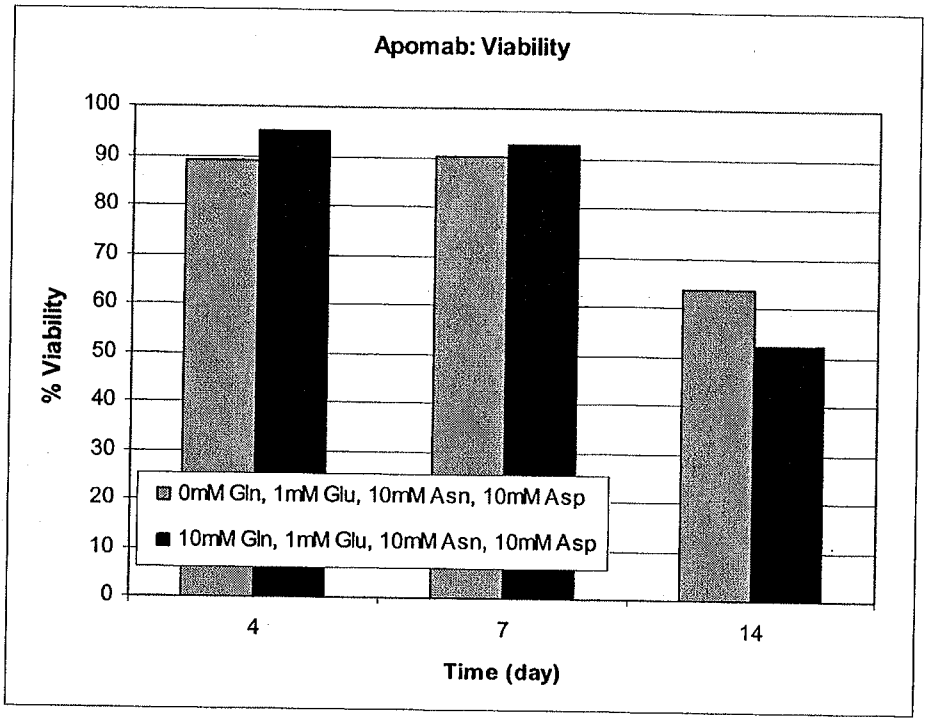

Apomab: Viability
100
90
80
70
60
50
40
30
20
10
0
% Viability
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
4
7
14
Time (day)

Figure 10A

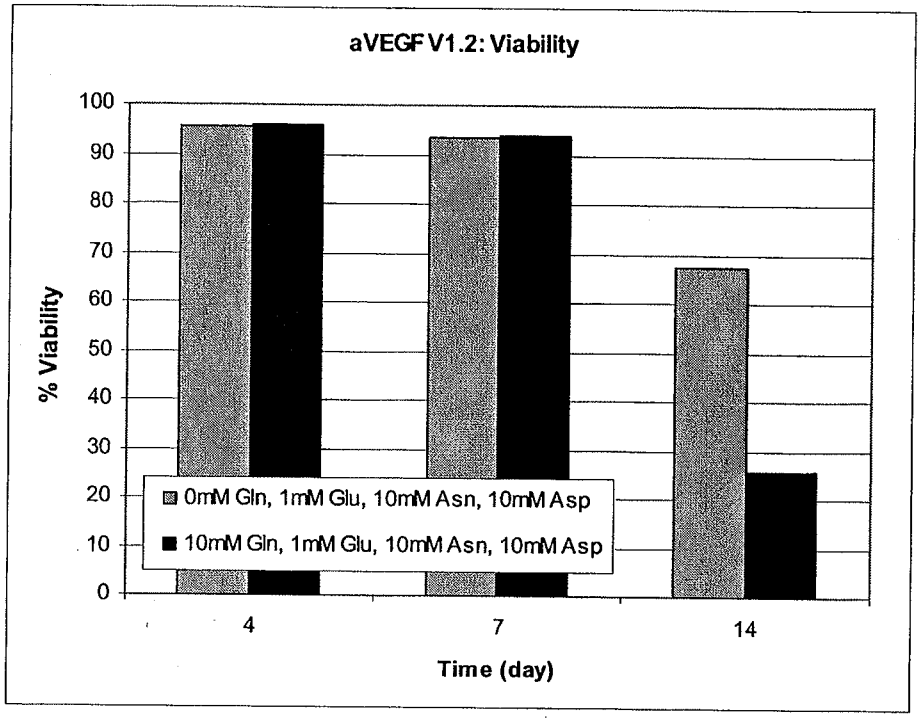

aVEGF V1.2: Viability
100
90
80
70
60
50
40
30
20
10
0
% Viability
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
4
7
14
Time (day)

Figure 10B

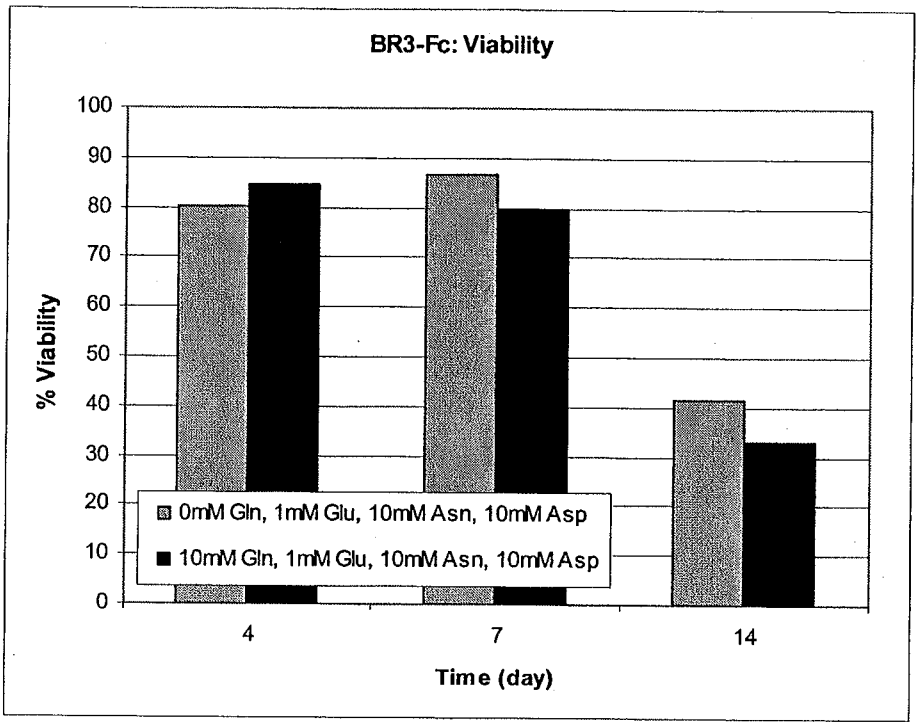

BR3-Fc: Viability
100
90
80
70
60
50
40
30
20
10
0
% Viability
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
4
7
14
Time (day)

Figure 10C

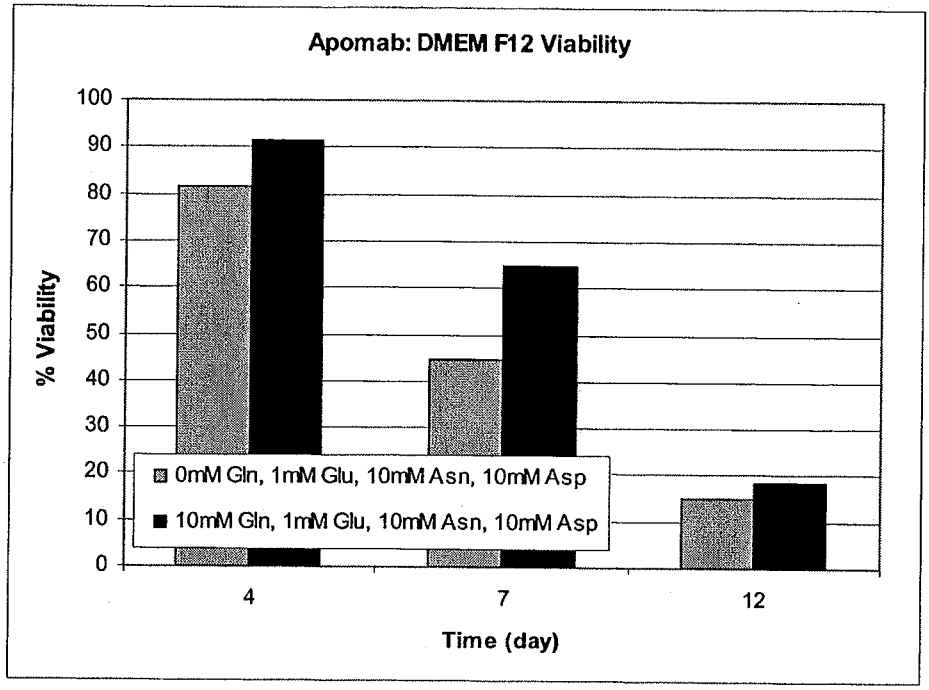

Apomab: DMEM F12 Viability
100
90
80
70
60
50
40
30
20
10
0
% Viability
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
4
7
12
Time (day)

Figure 11A

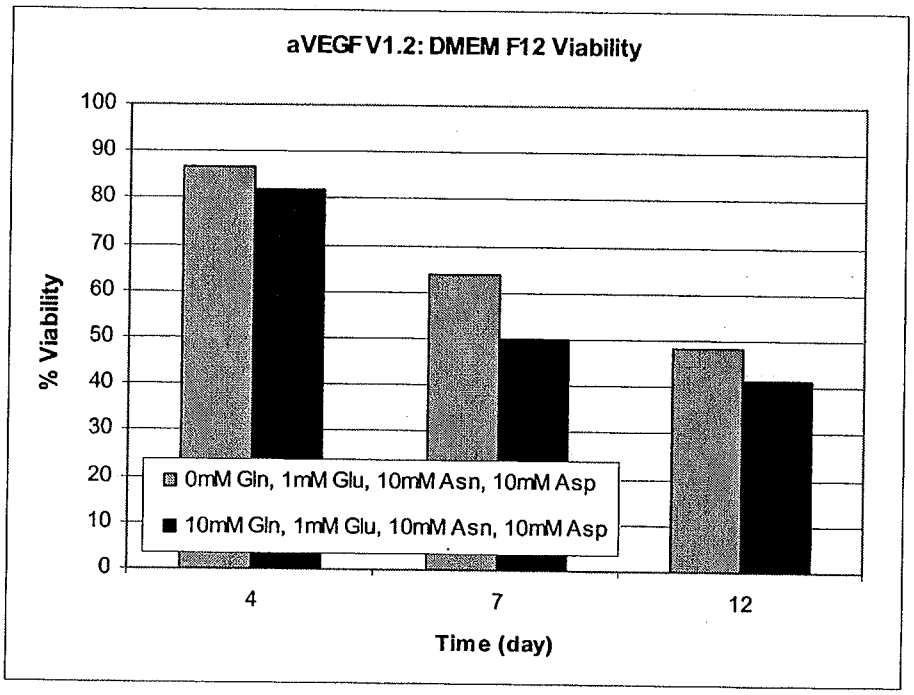

aVEGF V1.2: DMEM F12 Viability
100
90
80
70
60
50
40
30
20
10
0
% Viability
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
4
7
12
Time (day)

Figure 11B

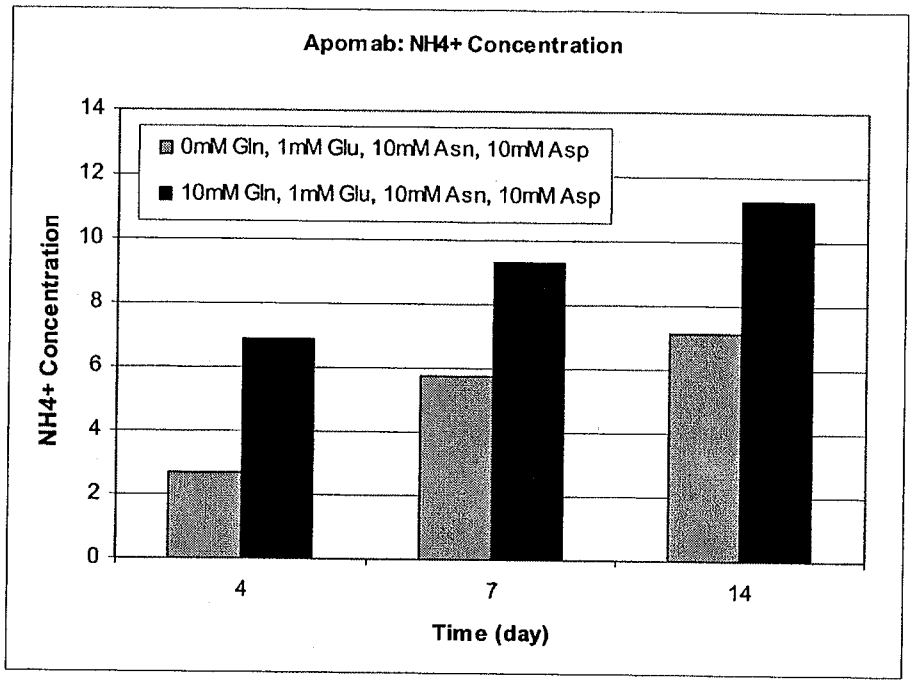

Apomab: NH4+ Concentration
NH4+ Concentration
14
12
10
8
6
4
2
0
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
4
7
14
Time (day)

Figure 12A

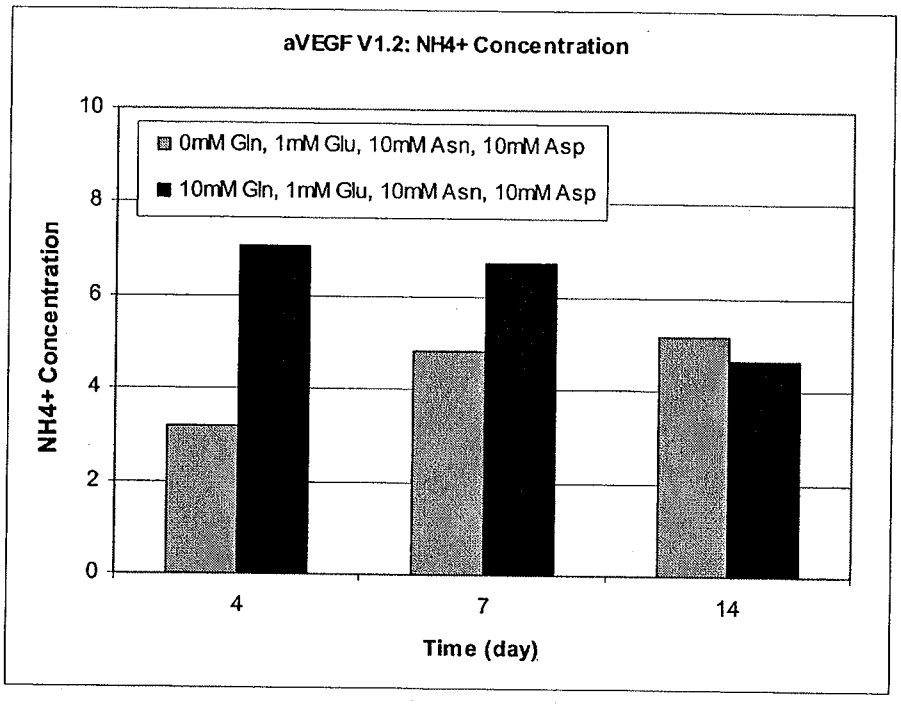

aVEGF V1.2: NH4+ Concentration
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
NH4+ Concentration
10
8
6
4
2
0
4
7
14
Time (day)

Figure 12B

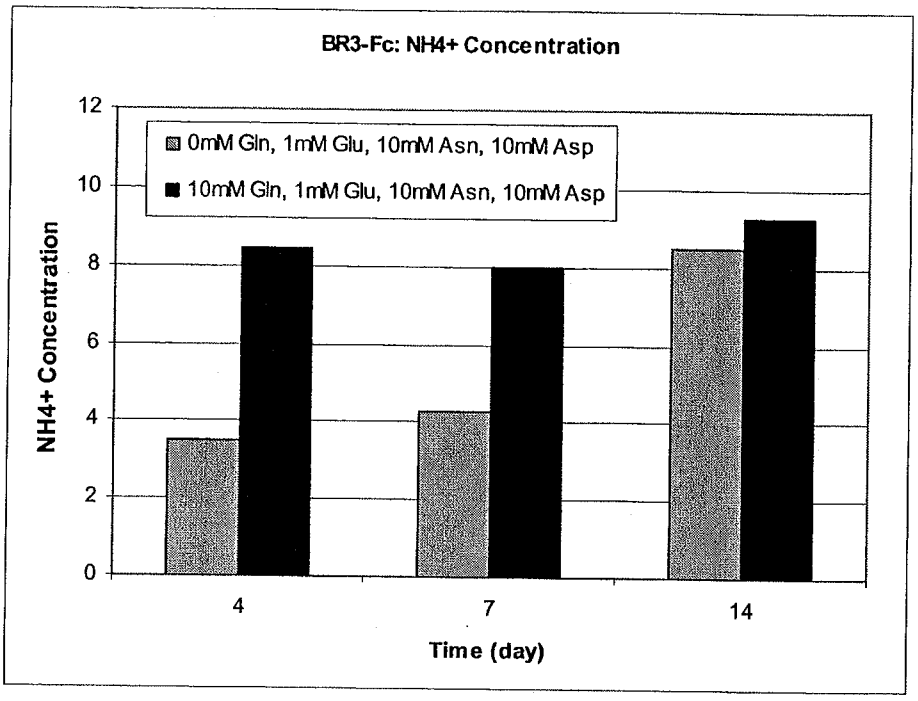

BR3-Fc: NH4+ Concentration
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
NH4+ Concentration
12
10
8
6
4
2
0
4
7
14
Time (day)

Figure 12C

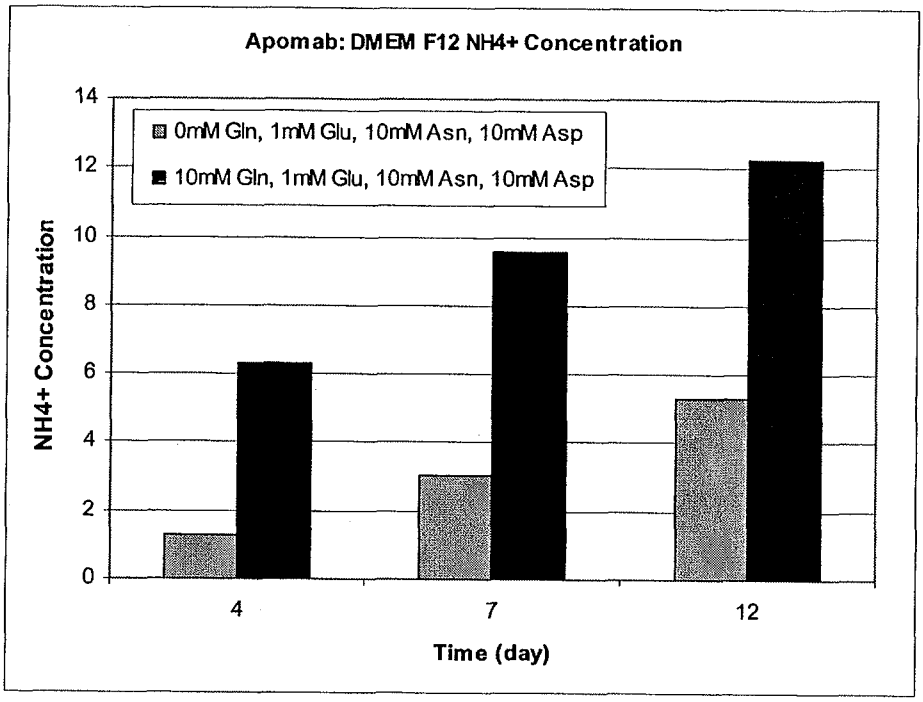

Apomab: DMEM F12 NH4+ Concentration
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
NH4+ Concentration
0
2
4
6
8
10
12
14
4
7
12
Time (day)

Figure 13A

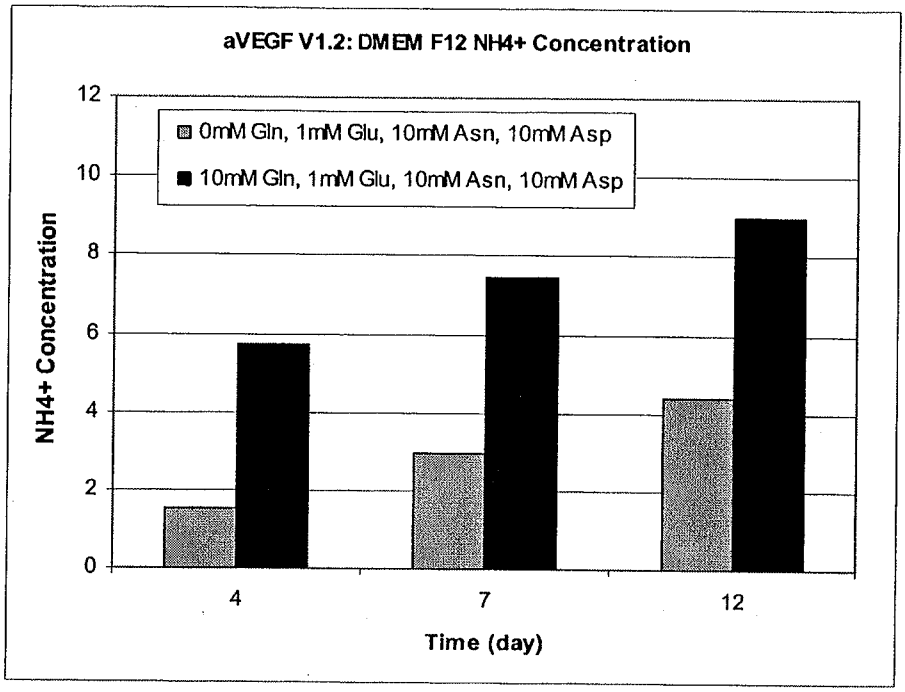

aVEGF V1.2: DMEM F12 NH4+ Concentration
0mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
10mM Gln, 1mM Glu, 10mM Asn, 10mM Asp
NH4+ Concentration
0
2
4
6
8
10
12
4
7
12
Time (day)

Figure 13B