

Figure 1

Figure 2

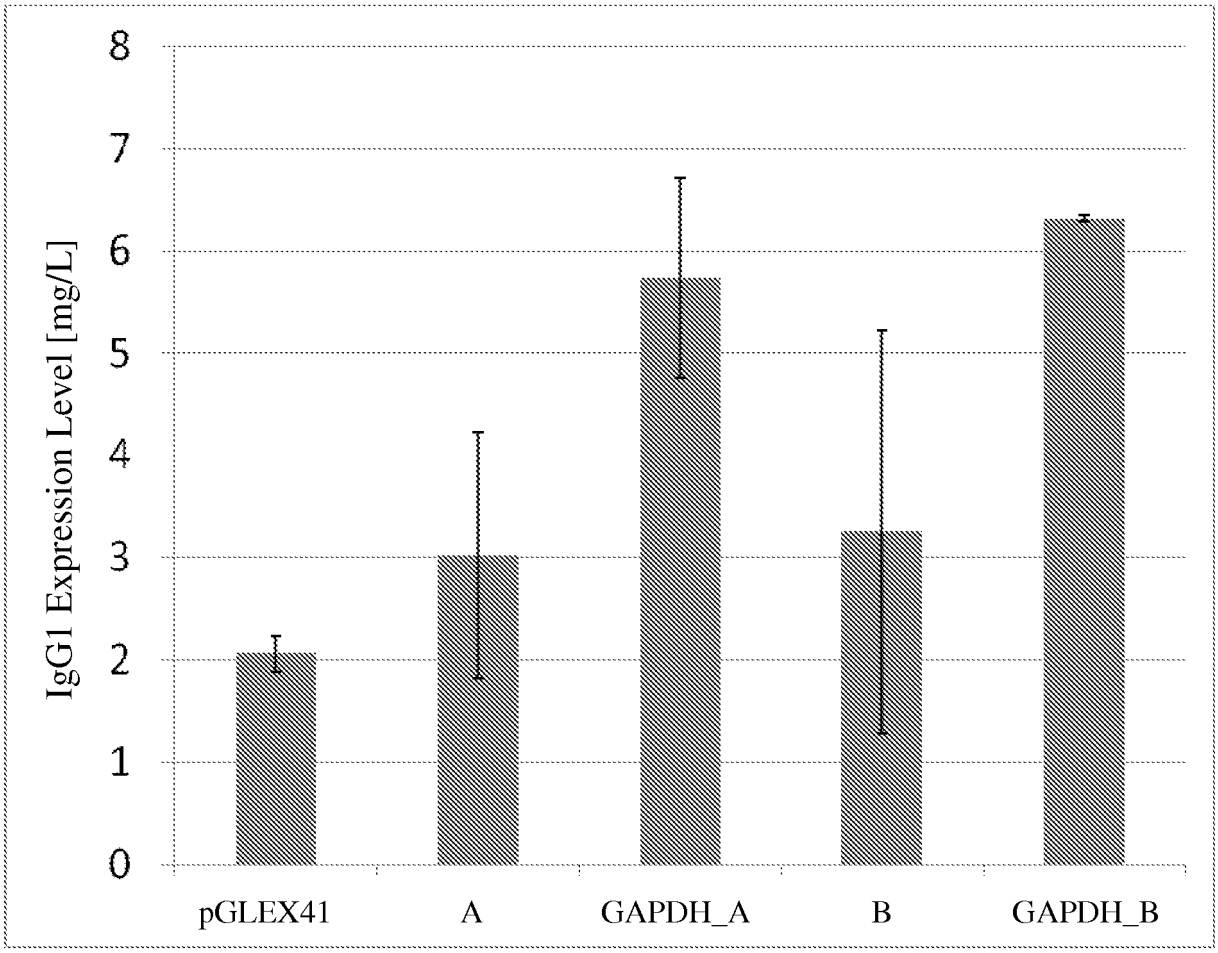

IgG1 Expression Level [mg/L]
0
1
2
3
4
5
6
7
8
pGLEX41
A
GAPDH_A
B
GAPDH_B

Figure 3

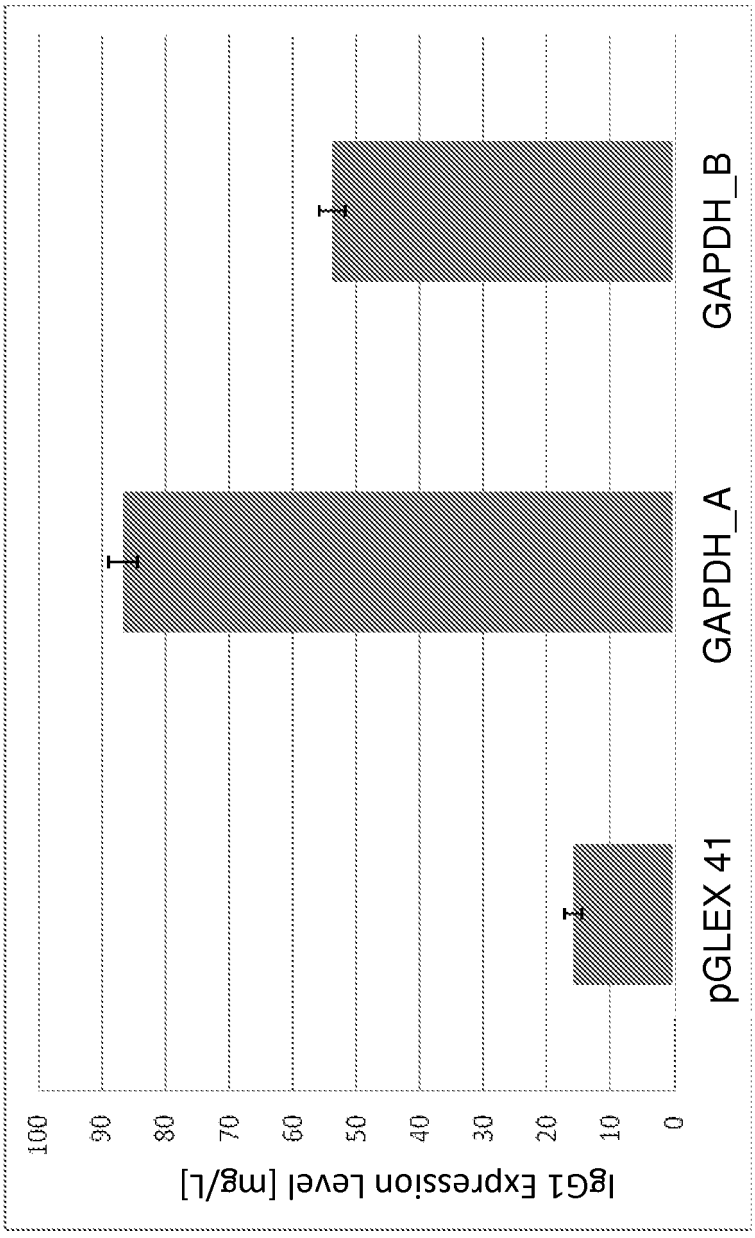

IgG1 Expression Level [mg/L]
100
90
80
70
60
50
40
30
20
10
0
pGLEX 41
GAPDH_A
GAPDH_B

Figure 4

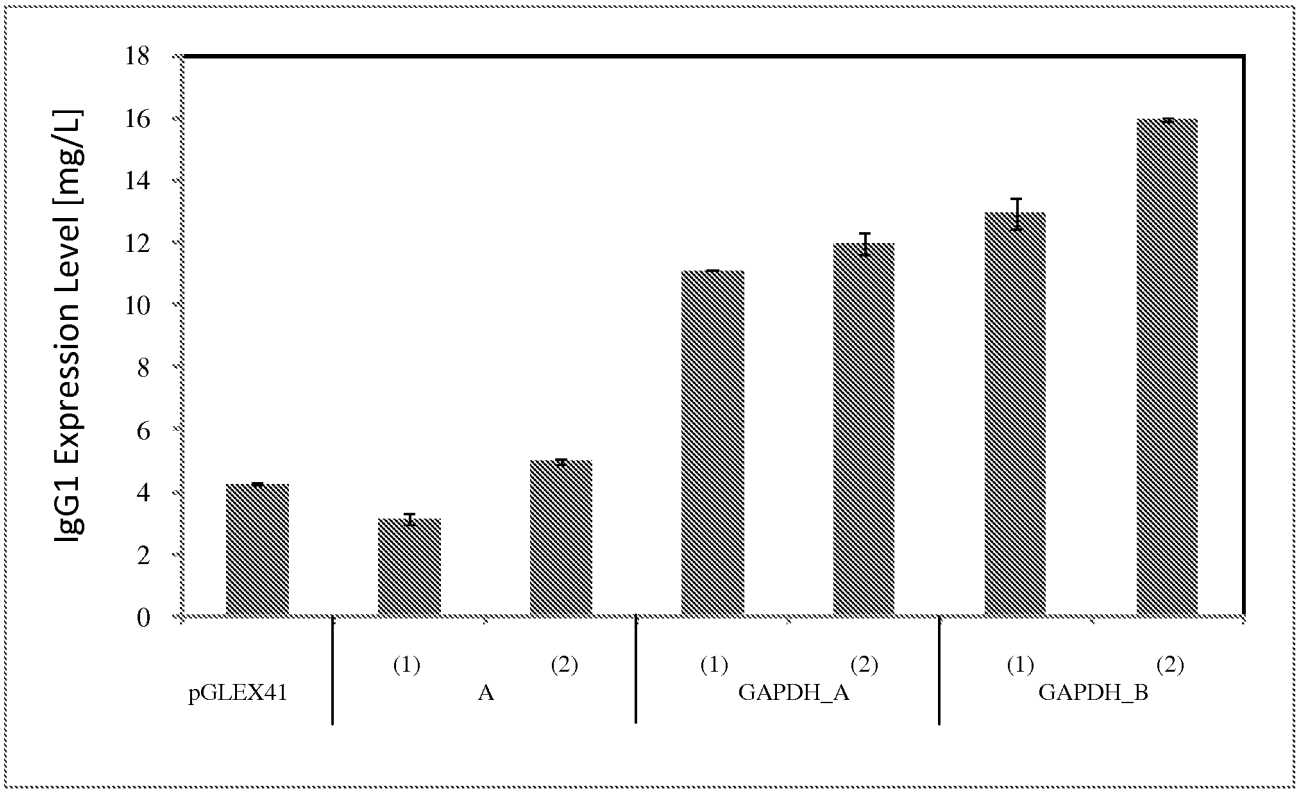

IgG1 Expression Level [mg/L]
18
16
14
12
10
8
6
4
2
0
pGLEX41
(1)
(2)
A
(1)
(2)
GAPDH_A
(1)
(2)
GAPDH_B

Figure 5

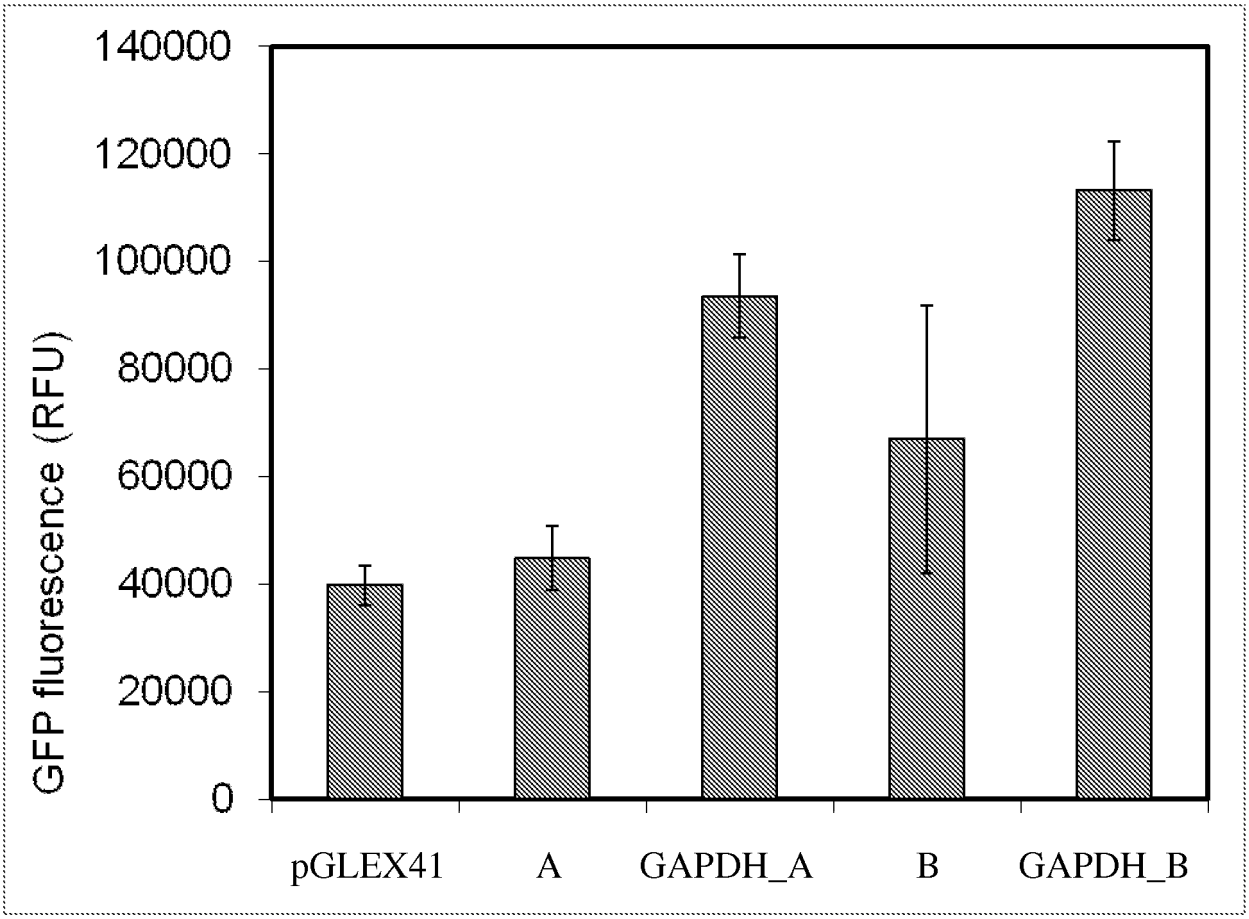
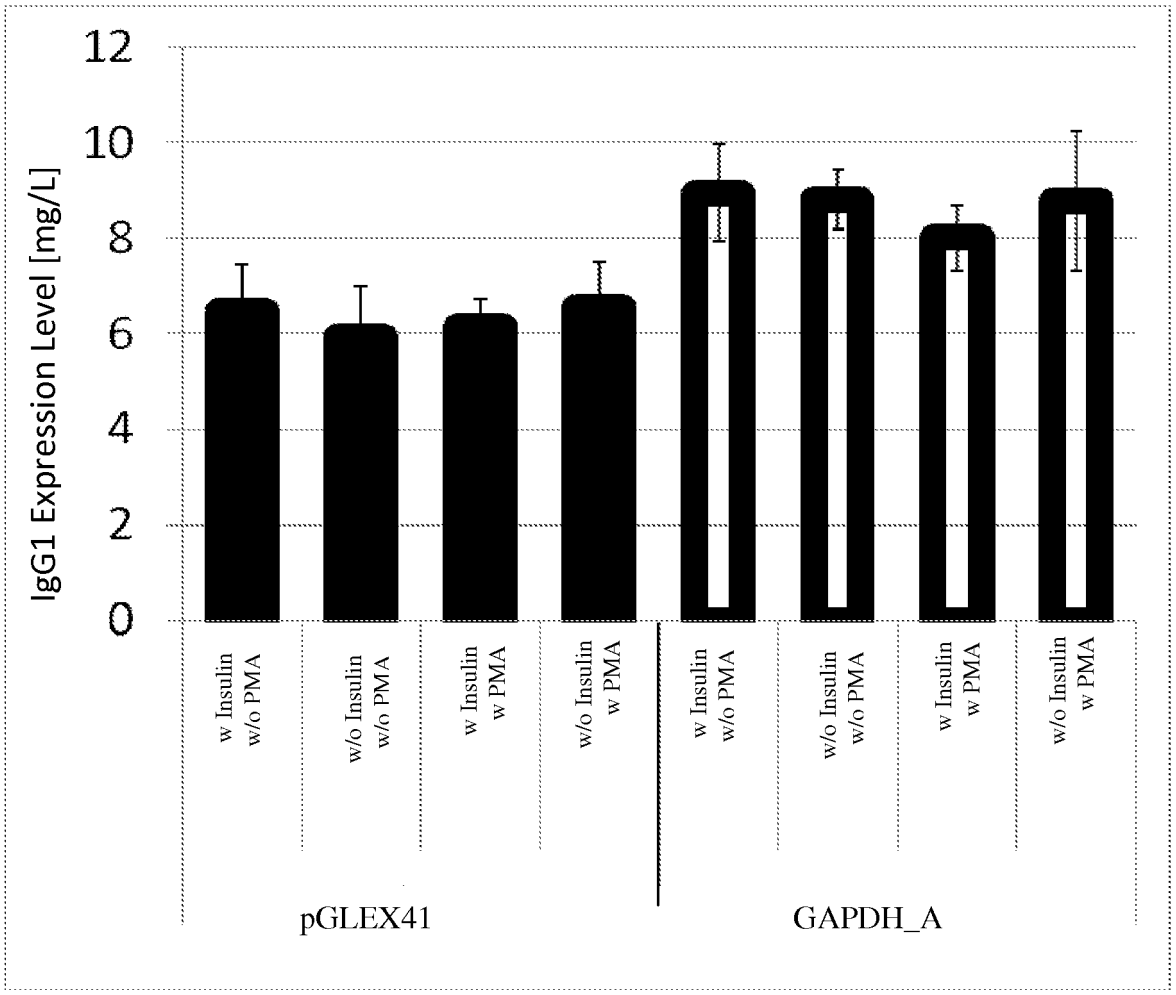

140000
120000
100000
80000
60000
40000
20000
0
GFP fluorescence (RFU)
pGLEX41
A
GAPDH_A
B
GAPDH_B

Figure 6


IgG1 Expression Level [mg/L]
12
10
8
6
4
2
0
w Insulin w/o PMA
w/o Insulin w/o PMA
w Insulin w PMA
w/o Insulin w PMA
w Insulin w/o PMA
w/o Insulin w/o PMA
w Insulin w PMA
w/o Insulin w PMA
pGLEX41
GAPDH_A

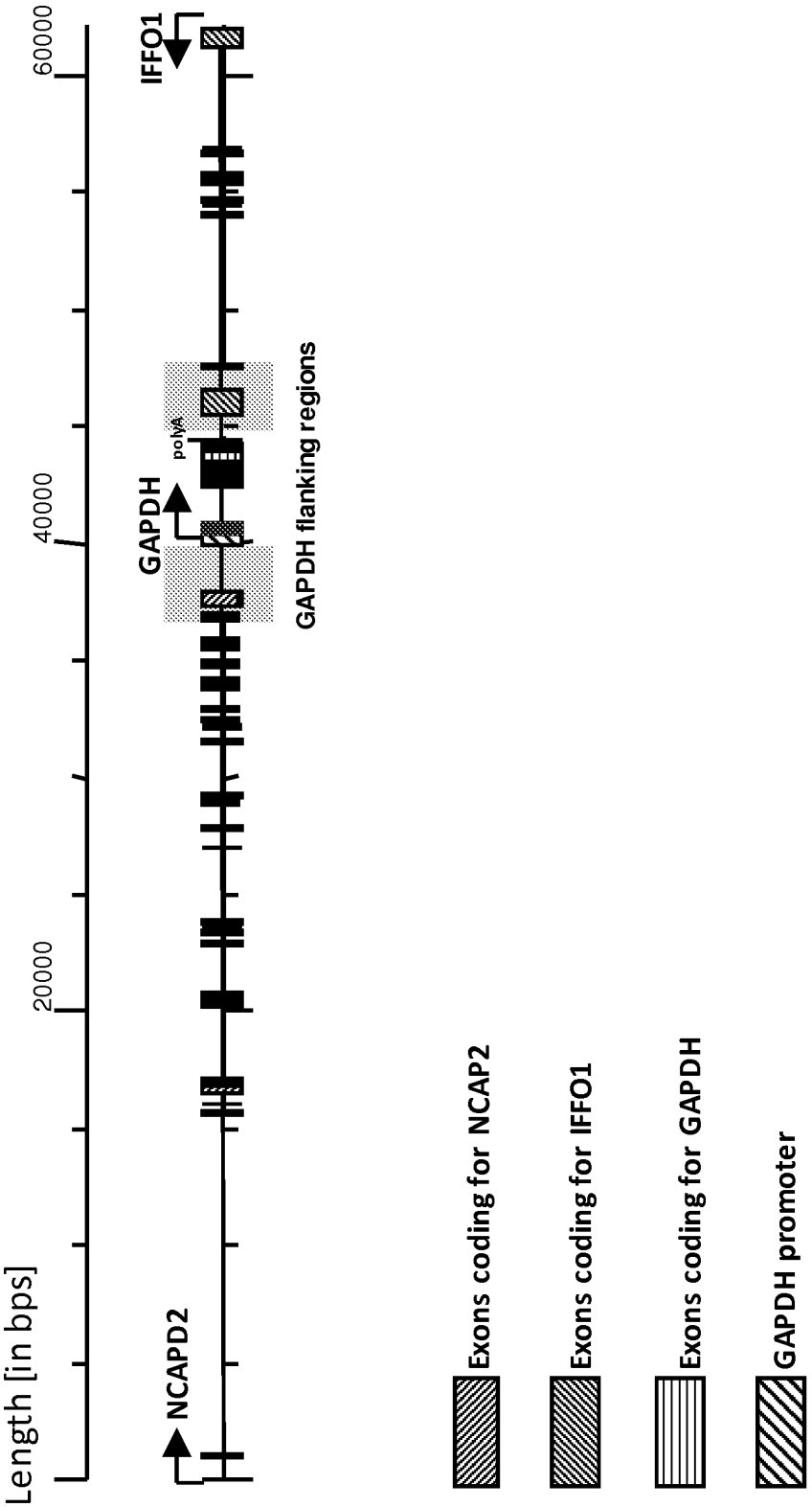
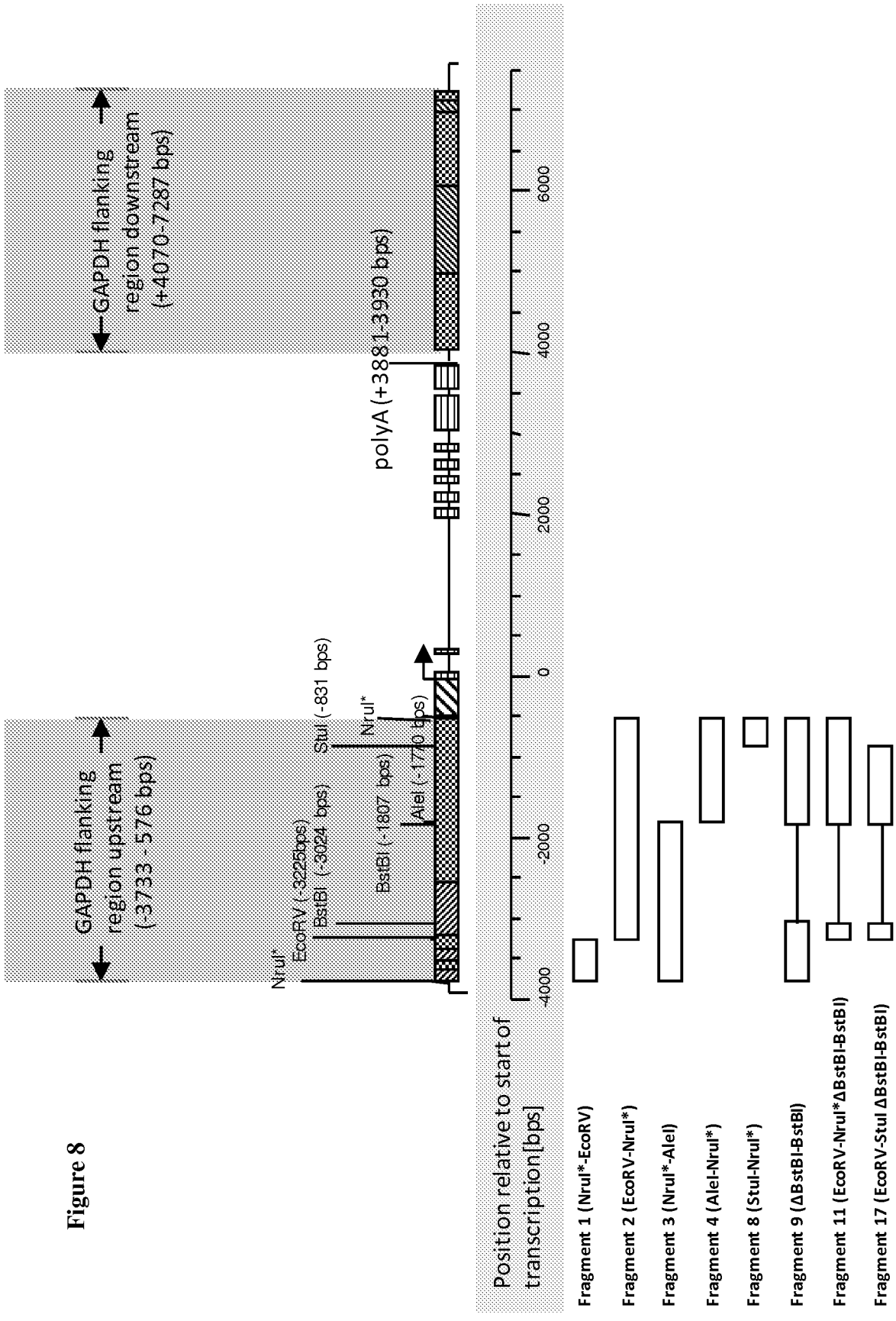

Length [in bps]
20000
40000
60000
NCAPD2
GAPDH
polyA
IFFO1
GAPDH flanking regions
Exons coding for NCAP2
Exons coding for IFFO1
Exons coding for GAPDH
GAPDH promoter

Figure 7

Figure 8


GAPDH flanking region upstream (-3733 - 576 bps)
GAPDH flanking region downstream (+4070-7287 bps)
polyA (+3881-3930 bps)
NruI*
EcoRV (-3225bps)
BstBI (-3024 bps)
BstBI (-1807 bps)
AleI (-1770 bps)
NruI*
StuI (-831 bps)
Position relative to start of transcription[bps]
-4000
-2000
0
2000
4000
6000
Fragment 1 (NruI*-EcoRV)
Fragment 2 (EcoRV-NruI*)
Fragment 3 (NruI*-AleI)
Fragment 4 (AleI-NruI*)
Fragment 8 (StuI-NruI*)
Fragment 9 (ΔBstBI-BstBI)
Fragment 11 (EcoRV-NruI*ΔBstBI-BstBI)
Fragment 17 (EcoRV-StuI ΔBstBI-BstBI)

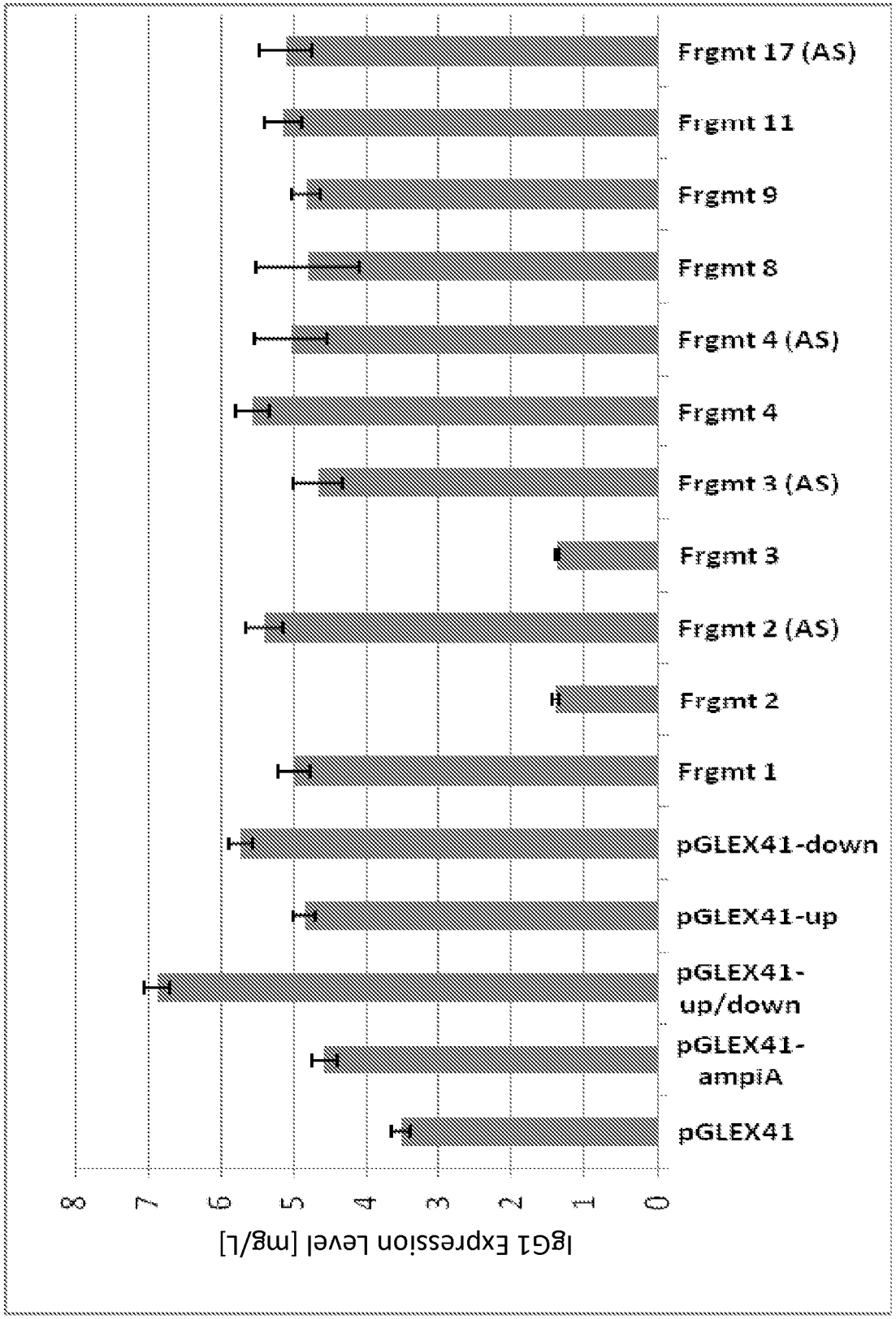
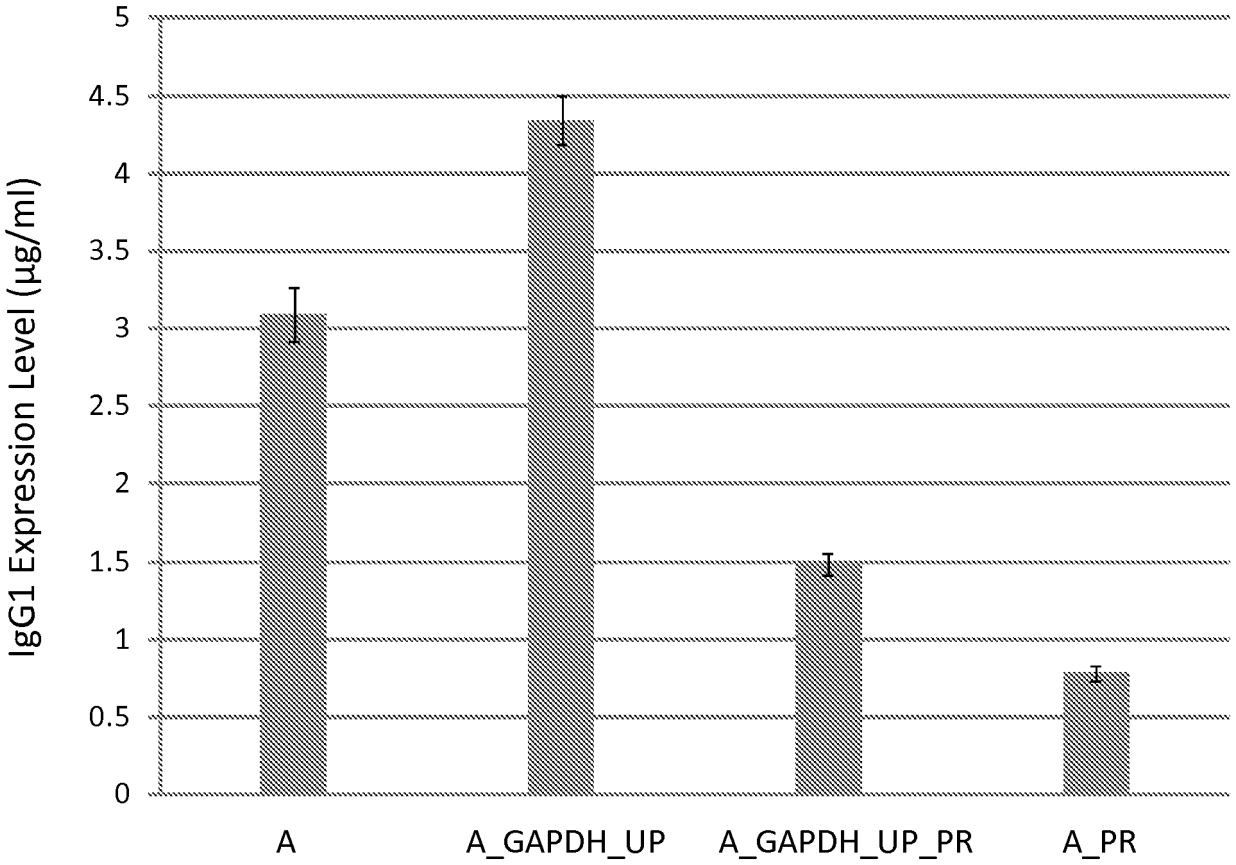

IgG1 Expression Level [mg/L]
0
1
2
3
4
5
6
7
8
pGLEX41
pGLEX41-ampiA
pGLEX41-up/down
pGLEX41-up
pGLEX41-down
Frgmt 1
Frgmt 2
Frgmt 2 (AS)
Frgmt 3
Frgmt 3 (AS)
Frgmt 4
Frgmt 4 (AS)
Frgmt 8
Frgmt 9
Frgmt 11
Frgmt 17 (AS)

Figure 9

Figure 10


IgG1 Expression Level (µg/ml)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
A
A_GAPDH_UP
A_GAPDH_UP_PR
A_PR