FIG. 1

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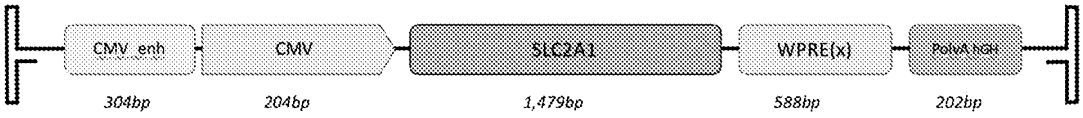
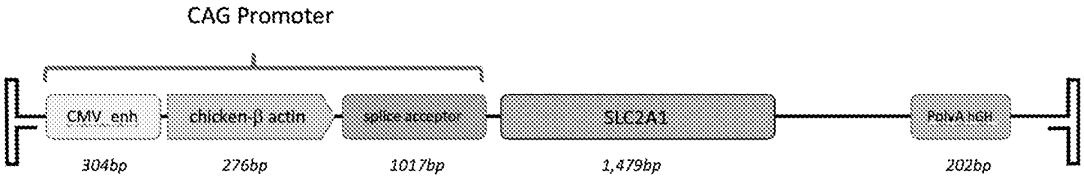
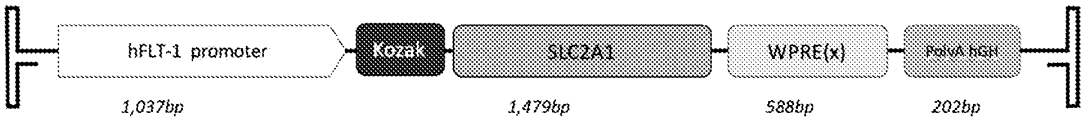


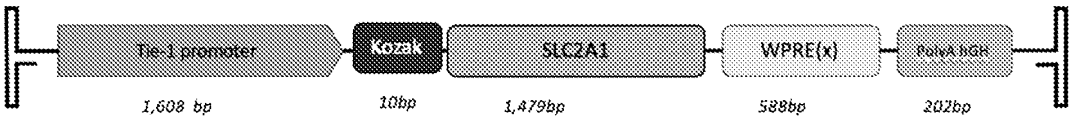
2.CAG-SLC2A1 – 3,750 bp



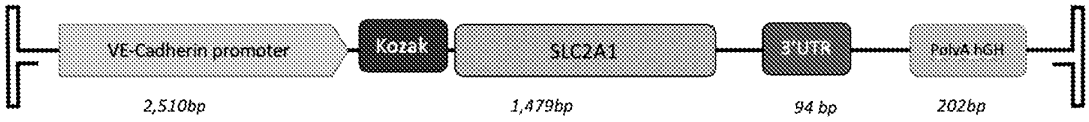
3.hFLT1-SLC2A1 – 3,745 bp



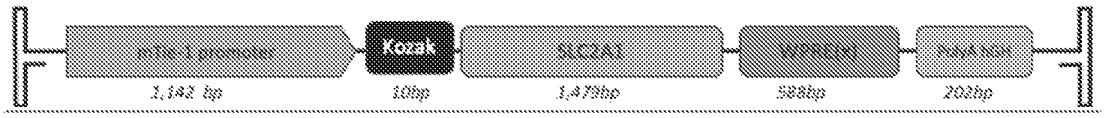
4.Tie1-SLC2A1 – 4,258bp



5.VE-Cadherin-SLC2A1 – 4,716 bp



6.mTie1-SLC2A1 – 3,850bp



7.hGLUT-SLC2A1 – 3,010 bp

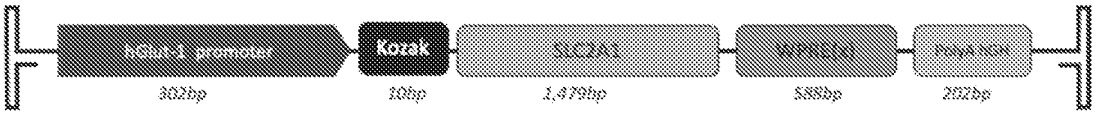


FIG. 1 (con't)

FIG. 2

CMV-SLC2A1-WPRE – 3,299bp

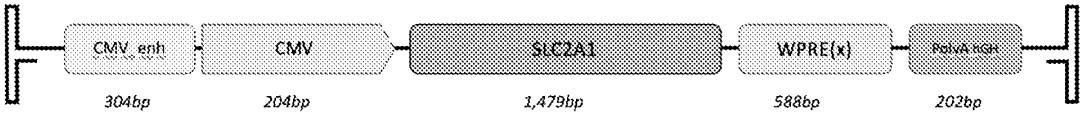


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FIG. 2 (con't)

FIG. 3

CAG-SLC2A1 – 3,750 bp

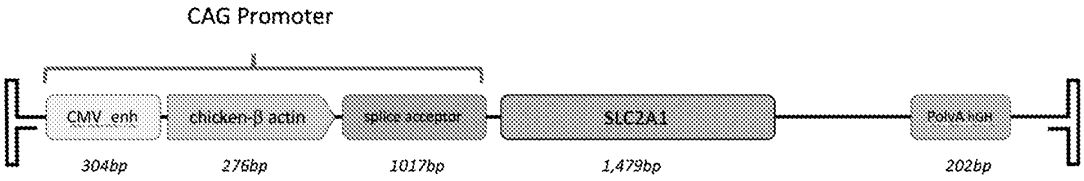

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FIG. 3 (con't)

FIG. 4

hFLT1-SLC2A1 – 3,745 bp

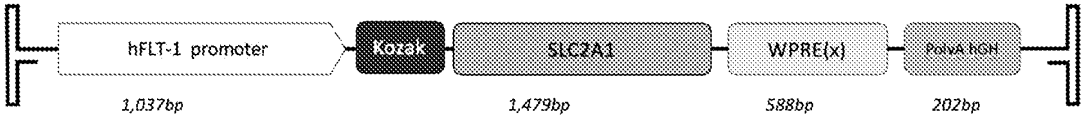

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FIG. 4 (con't)

FIG. 5

hTie1-SLC2A1 – 4,258 bp

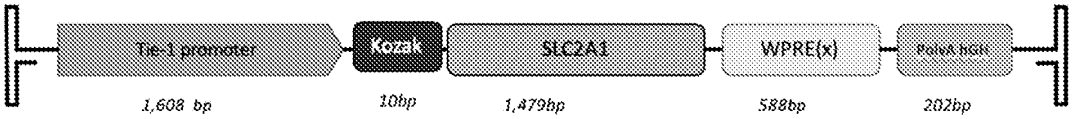

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FIG. 5 (con't)

FIG. 6

VE-Cadherin-SLC2A1 – 4,716 bp

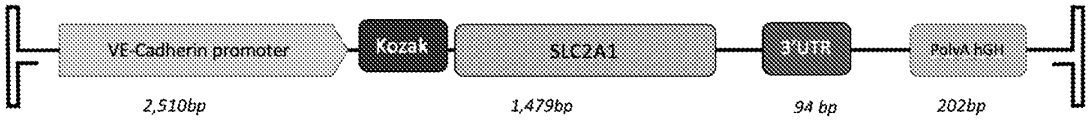

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FIG. 6 (con't)

FIG. 7

mTie1-SLC2A1 – 3,850 bp

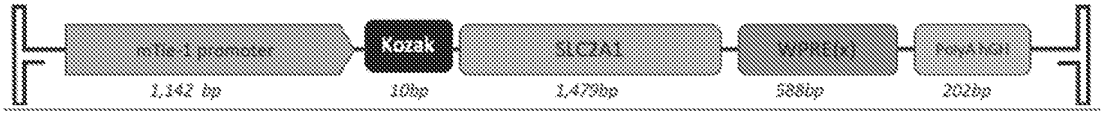

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FIG. 7 (con't)

FIG. 8

hGLUT-SLC2A1 – 3,010 bp

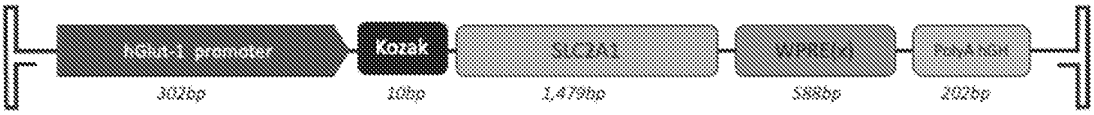

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FIG. 8 (con't)

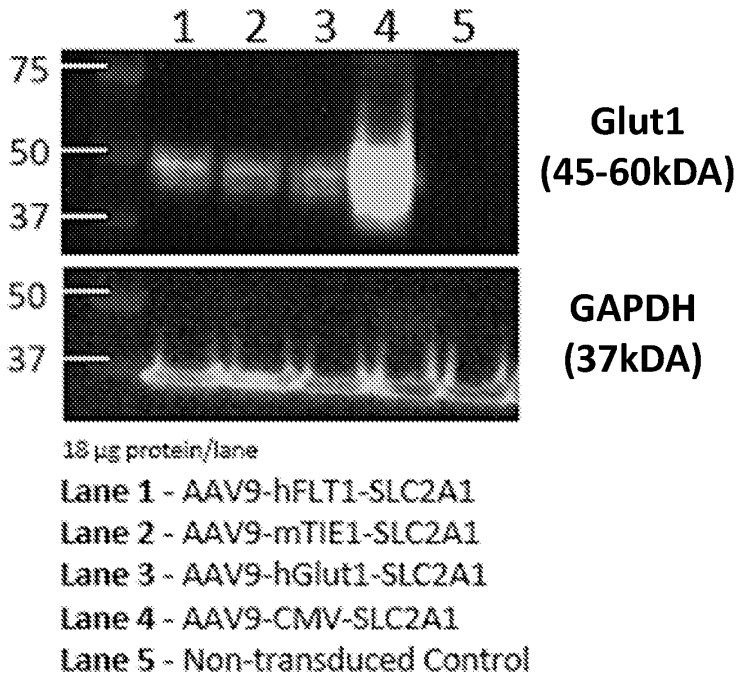
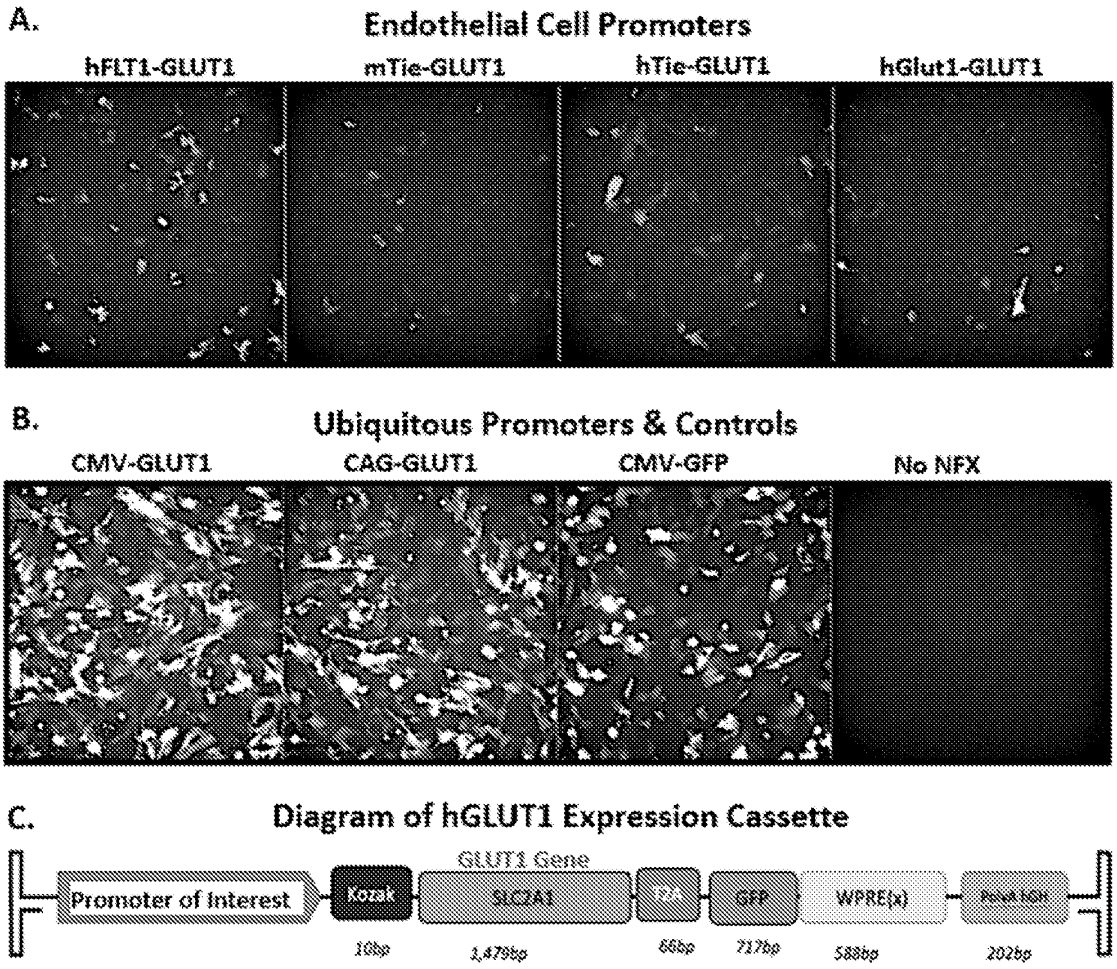

1 2 3 4 5
75
50
37
Glut1
(45-60kDA)
50
37
GAPDH
(37kDA)
18 µg protein/lane
Lane 1 - AAV9-hFLT1-SLC2A1
Lane 2 - AAV9-mTIE1-SLC2A1
Lane 3 - AAV9-hGlut1-SLC2A1
Lane 4 - AAV9-CMV-SLC2A1
Lane 5 - Non-transduced Control

FIG. 9


A.
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hFLT1-GLUT1
mTie-GLUT1
hTie-GLUT1
hGlut1-GLUT1
B.
Ubiquitous Promoters & Controls
CMV-GLUT1
CAG-GLUT1
CMV-GFP
No NFX
C.
Diagram of hGLUT1 Expression Cassette
GLUT1 Gene
Promoter of Interest
Kozak
SLC2A1
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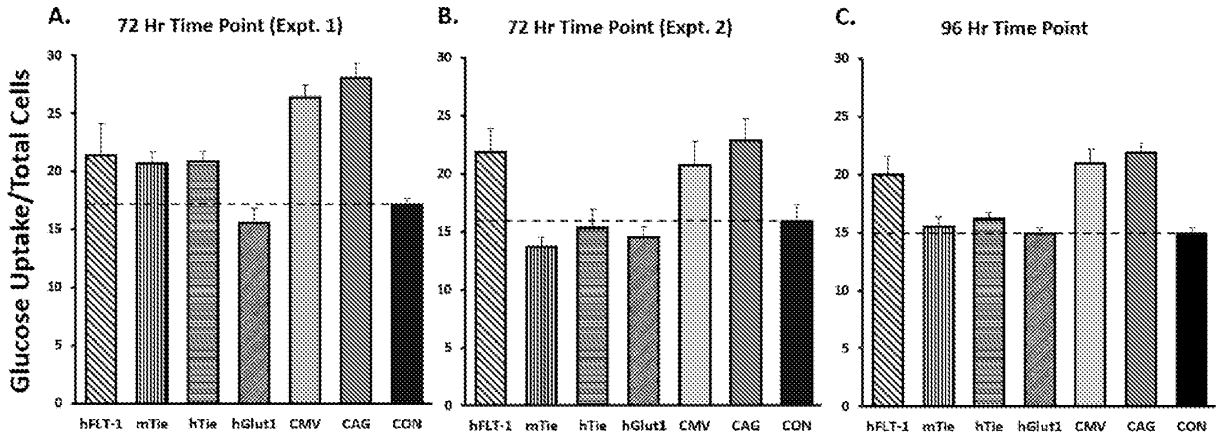
GFP
WPRE(x)
PolyA SDH
10bp
1,479bp
66bp
717bp
588bp
202bp

FIGs. 10A-10C


A.
72 Hr Time Point (Expt. 1)
B.
72 Hr Time Point (Expt. 2)
C.
96 Hr Time Point
Glucose Uptake/Total Cells
0
5
10
15
20
25
30
hFLT-1
mTie
hTie
hGlut1
CMV
CAG
CON

FIGs. 11A-11C

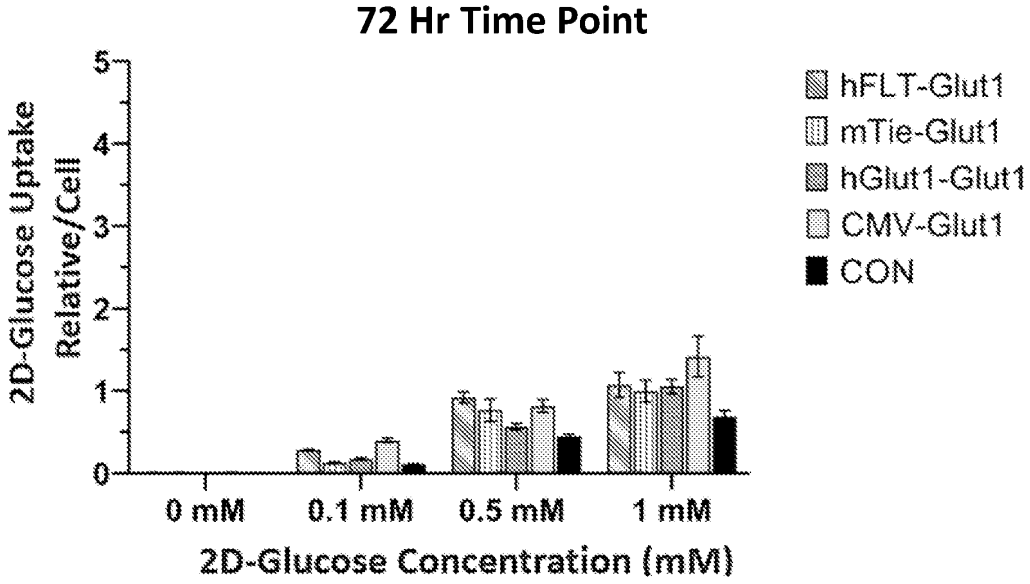


FIG. 12A

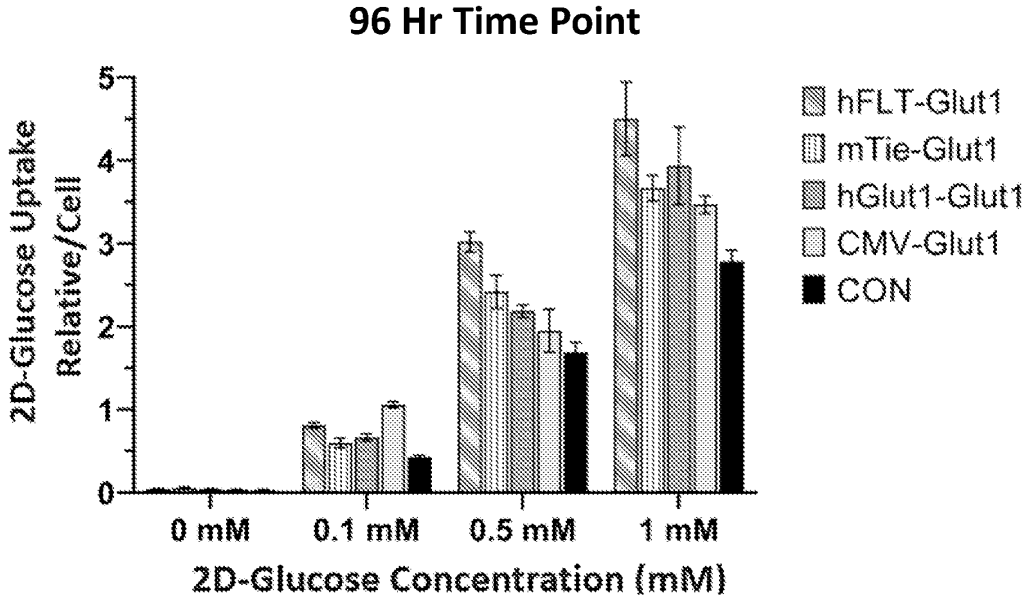


FIG. 12B

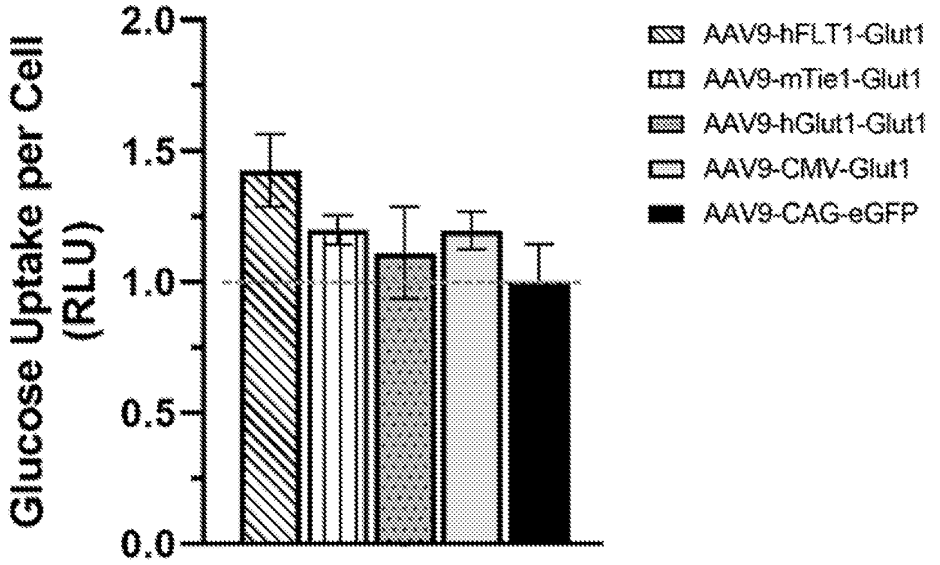

Glucose Uptake per Cell (RLU)
2.0
1.5
1.0
0.5
0.0
AAV9-hFLT1-Glut1
AAV9-mTie1-Glut1
AAV9-hGlut1-Glut1
AAV9-CMV-Glut1
AAV9-CAG-eGFP

FIG. 13