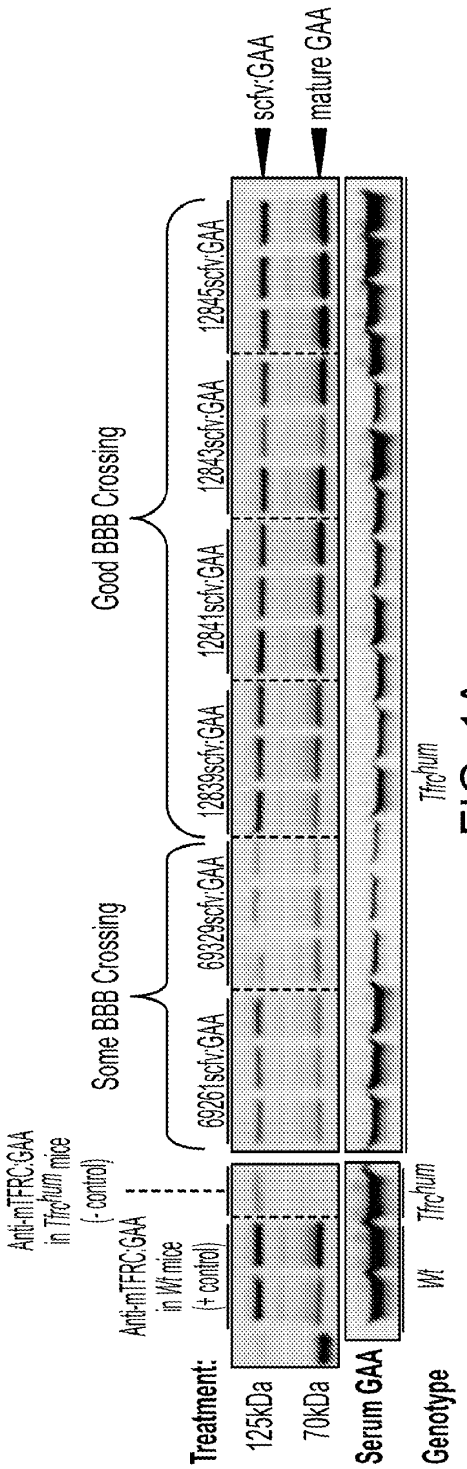

Some BBB Crossing
Good BBB Crossing
scfv:GAA
mature GAA
Anti-mTFRC:GAA in Trc^hum mice (- control)
Anti-mTFRC:GAA in Wt mice (+ control)
Treatment:
125kDa
70kDa
Serum GAA
Genotype
Wt
Trc^hum

FIG. 1A

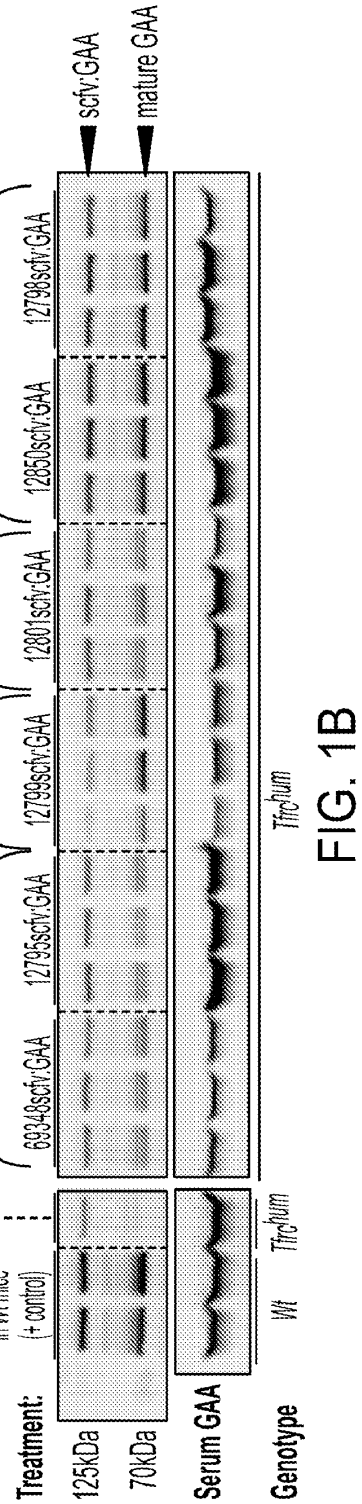

Some BBB Crossing
Good BBB Crossing
Some BBB Crossing
Good BBB Crossing
scfv:GAA
mature GAA
Anti-mTFRC:GAA in Trc^hum mice (- control)
Anti-mTFRC:GAA in Wt mice (+ control)
Treatment:
125kDa
70kDa
Serum GAA
Genotype
Wt
Trc^hum

FIG. 1B

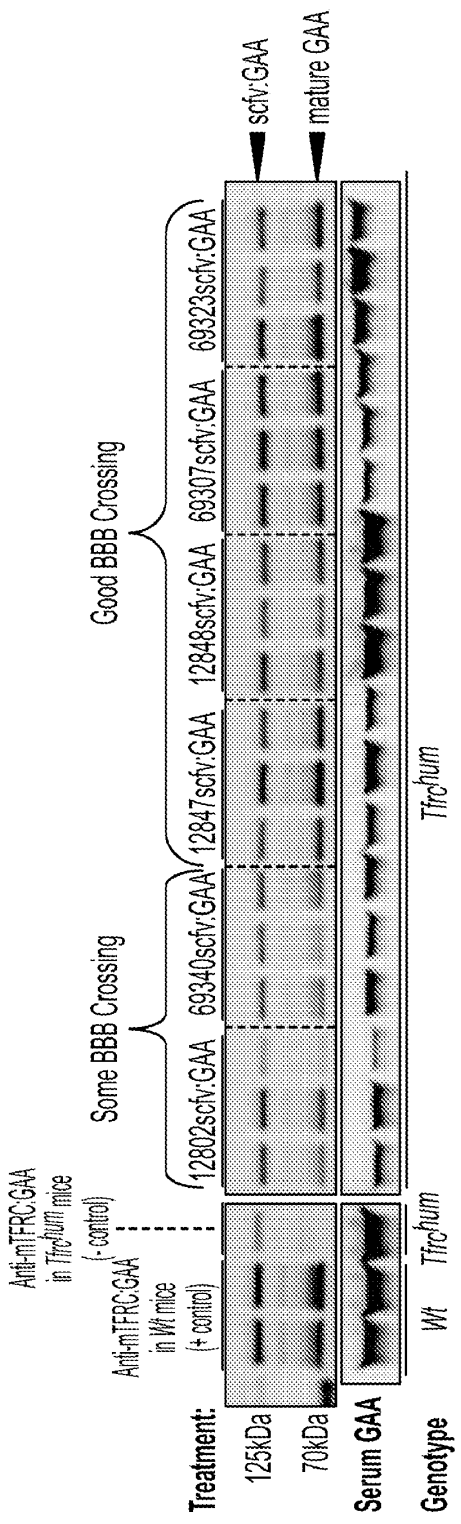

Anti-mTFRC:GAA in Tfrchum mice (- control)
Anti-mTFRC:GAA in Wt mice (+ control)
Some BBB Crossing
Good BBB Crossing
12802scfv:GAA
69340scfv:GAA
12847scfv:GAA
12848scfv:GAA
69307scfv:GAA
69323scfv:GAA
scfv:GAA
mature GAA
Treatment:
125kDa
70kDa
Serum GAA
Genotype
Wt
Tfrchum
Tfrchum

FIG. 1C

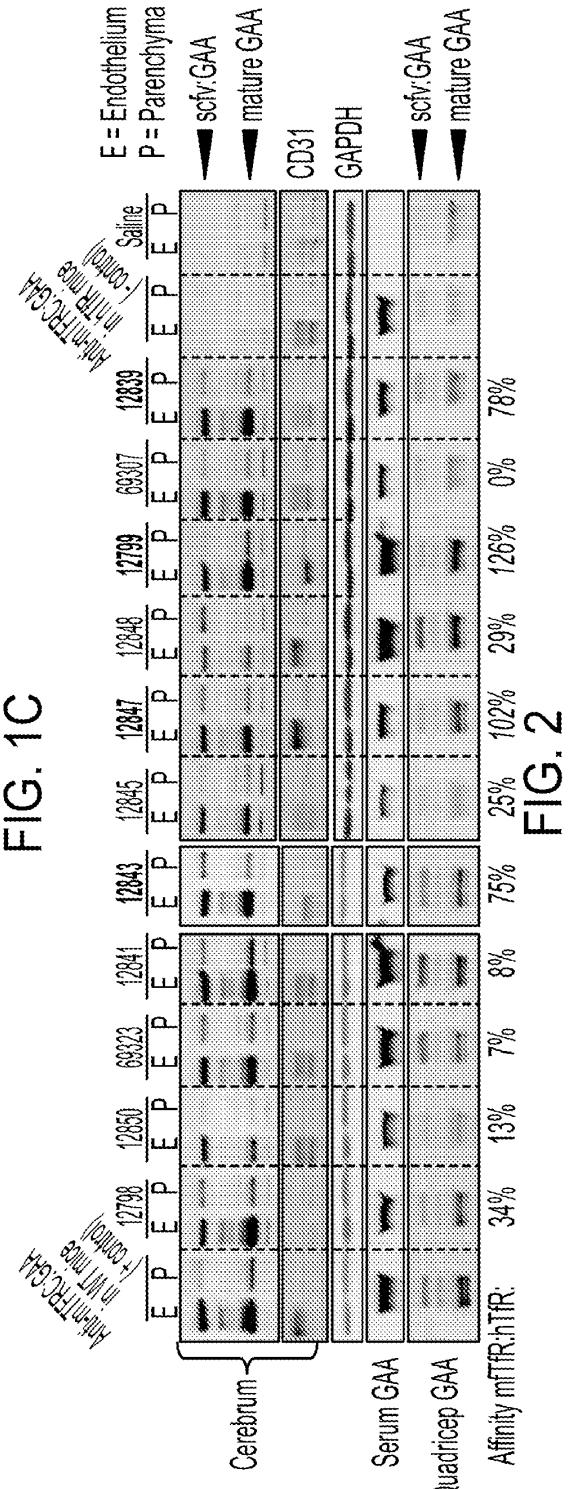

E = Endothelium
P = Parenchyma
Anti-mTFRC:GAA in Wt mice (+ control)
Anti-mTFRC:GAA in hTFR mice (- control)
Saline
12798
12850
69323
12841
12843
12845
12847
12848
12799
69307
12839
scfv:GAA
mature GAA
CD31
GAPDH
Cerebrum
Serum GAA
Quadricep GAA
Affinity mTfR:hTfR:
34%
13%
7%
8%
75%
25%
102%
29%
126%
0%
78%

FIG. 2

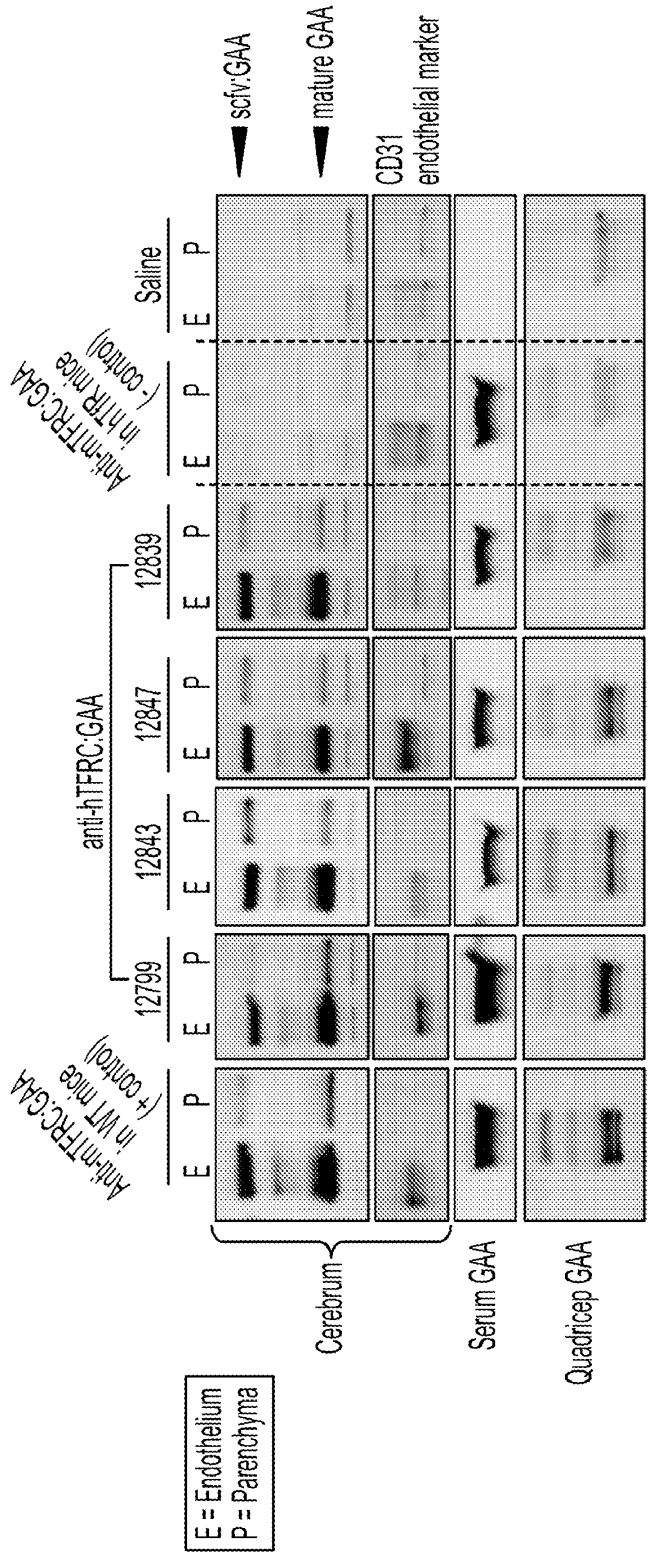

scfv:GAA
mature GAA
CD31
endothelial marker
Saline
Anti-mTFRC:GAA
in hTfR mice
(- control)
anti-hTFRC:GAA
12839
12847
12843
12799
Anti-mTFRC:GAA
in WT mice
(+ control)
E
P
Cerebrum
Serum GAA
Quadricep GAA
E = Endothelium
P = Parenchyma

FIG. 3

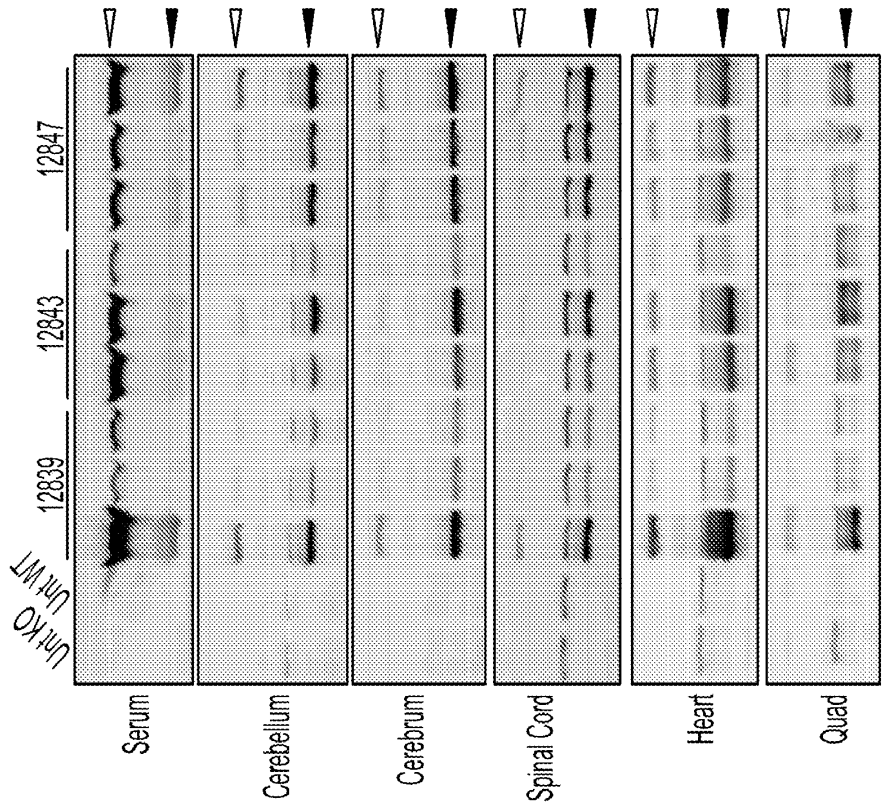

Un-KO
Un-WT
12839
12843
12847
Serum
Cerebellum
Cerebrum
Spinal Cord
Heart
Quad
scfv:GAA
mature GAA

FIG. 4

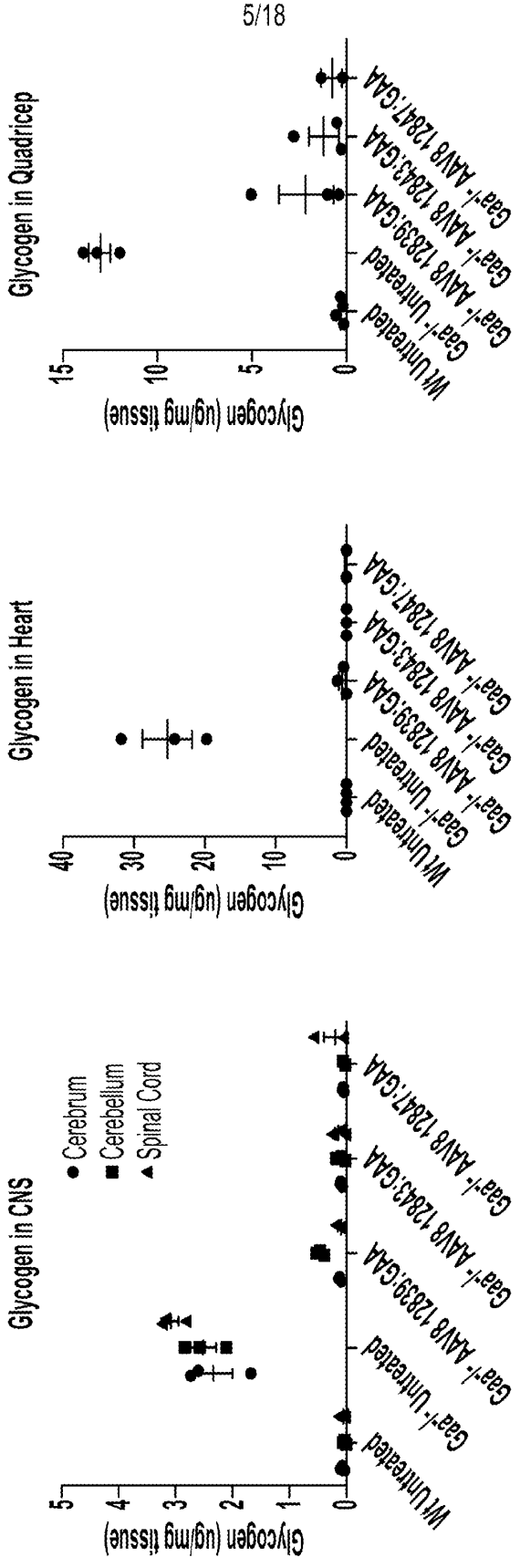

Glycogen in CNS
Cerebrum
Cerebellum
Spinal Cord
Glycogen (ug/mg tissue)
0
1
2
3
4
5
Wt Untreated
Gaa-/- Untreated
Gaa-/- AAV8 1283;GAA
Gaa-/- AAV8 1283;GAA
Gaa-/- AAV8 1284;GAA
Glycogen in Heart
Glycogen (ug/mg tissue)
0
10
20
30
40
Wt Untreated
Gaa-/- Untreated
Gaa-/- AAV8 1283;GAA
Gaa-/- AAV8 1283;GAA
Gaa-/- AAV8 1284;GAA
Glycogen in Quadricep
Glycogen (ug/mg tissue)
0
5
10
15
Wt Untreated
Gaa-/- Untreated
Gaa-/- AAV8 1283;GAA
Gaa-/- AAV8 1283;GAA
Gaa-/- AAV8 1284;GAA

FIG. 5

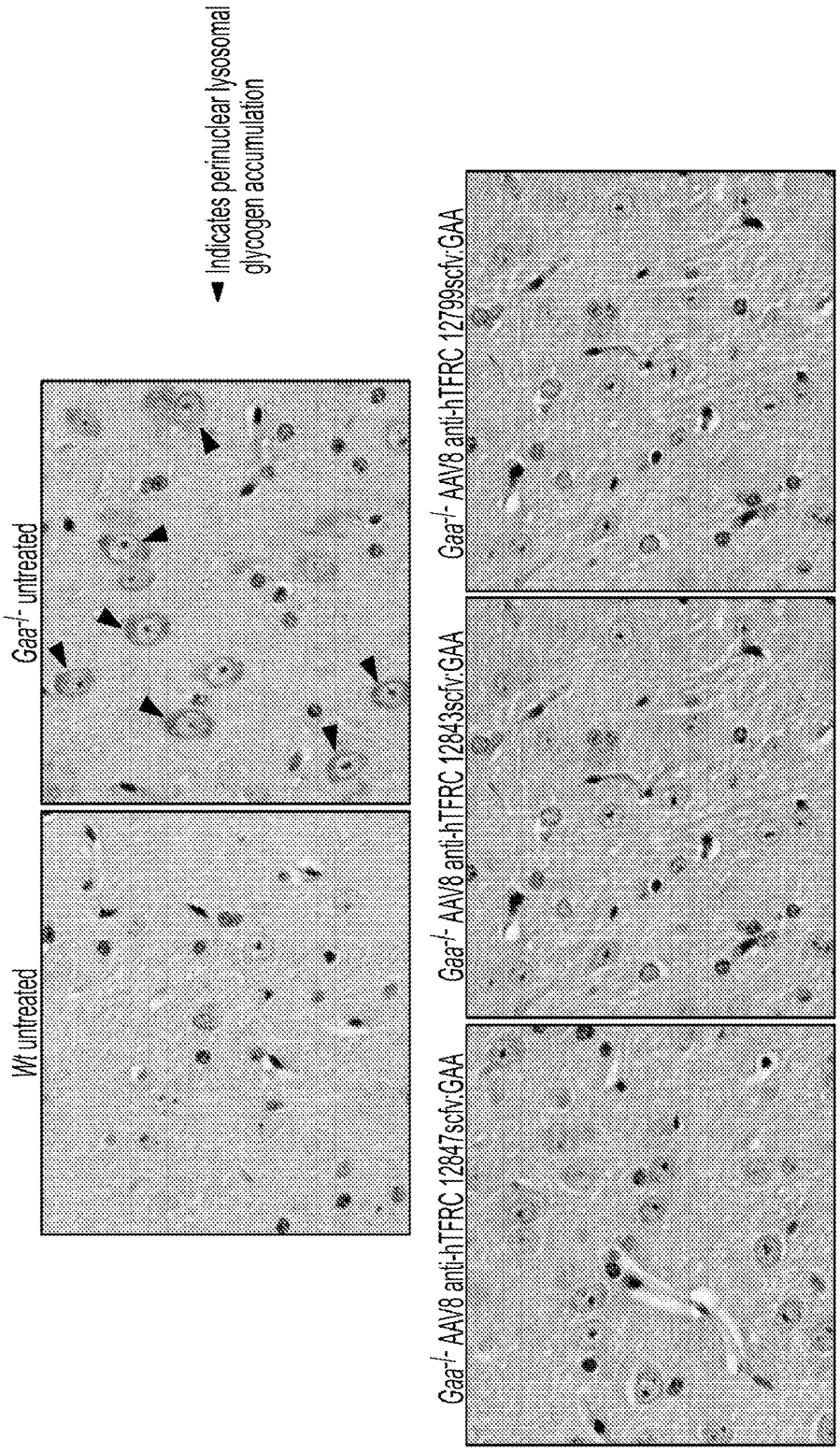

Indicates perinuclear lysosomal glycogen accumulation
Wt untreated
Gaa-/- untreated
Gaa-/- AAV8 anti-hTFRC 12847scfv:GAA
Gaa-/- AAV8 anti-hTFRC 12843scfv:GAA
Gaa-/- AAV8 anti-hTFRC 12799scfv:GAA

FIG. 6A

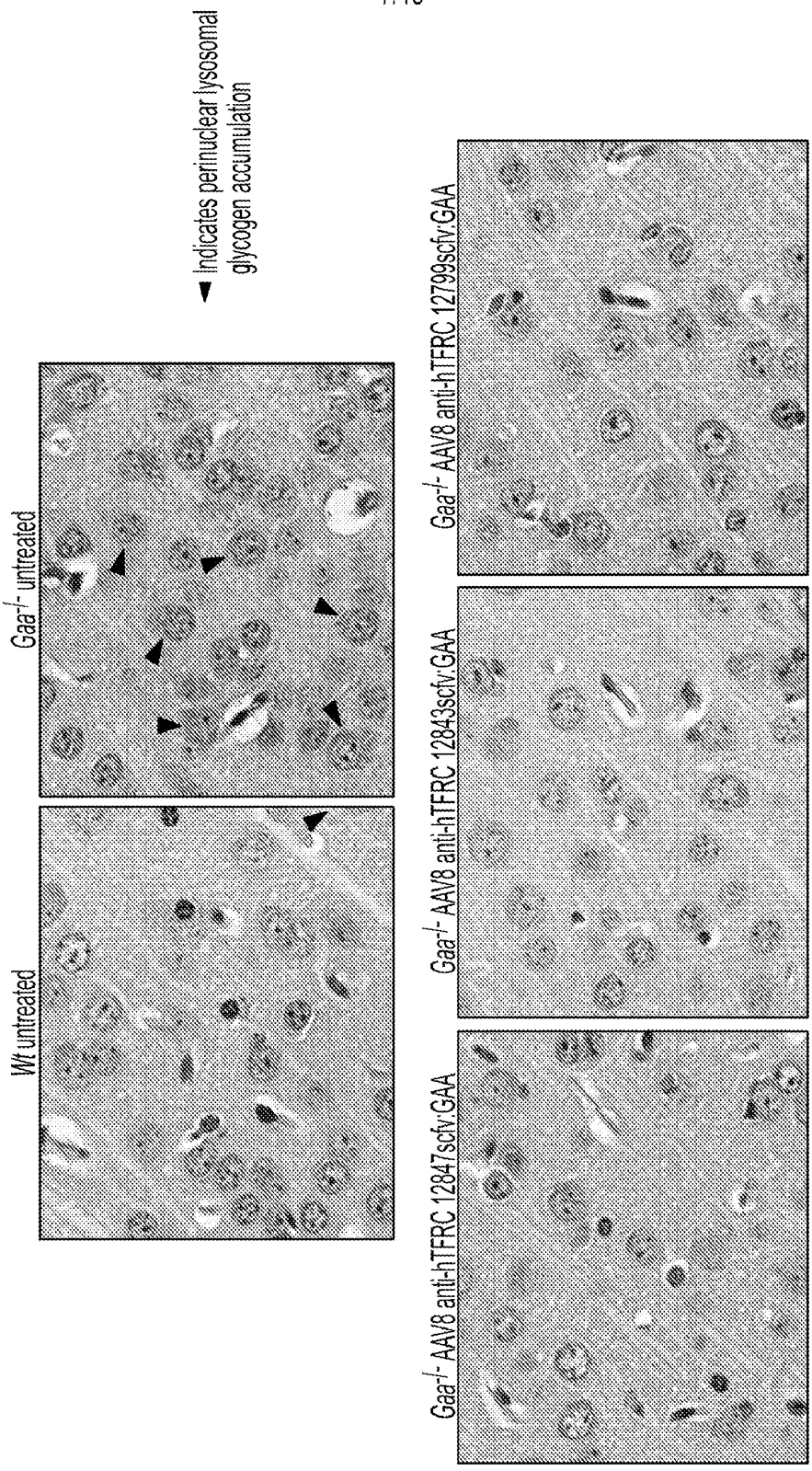

▼ Indicates perinuclear lysosomal glycogen accumulation
Wt untreated
Gaa-/- untreated
Gaa-/- AAV8 anti-hTFRC 12847scfv:GAA
Gaa-/- AAV8 anti-hTFRC 12843scfv:GAA
Gaa-/- AAV8 anti-hTFRC 12799scfv:GAA

FIG. 6B

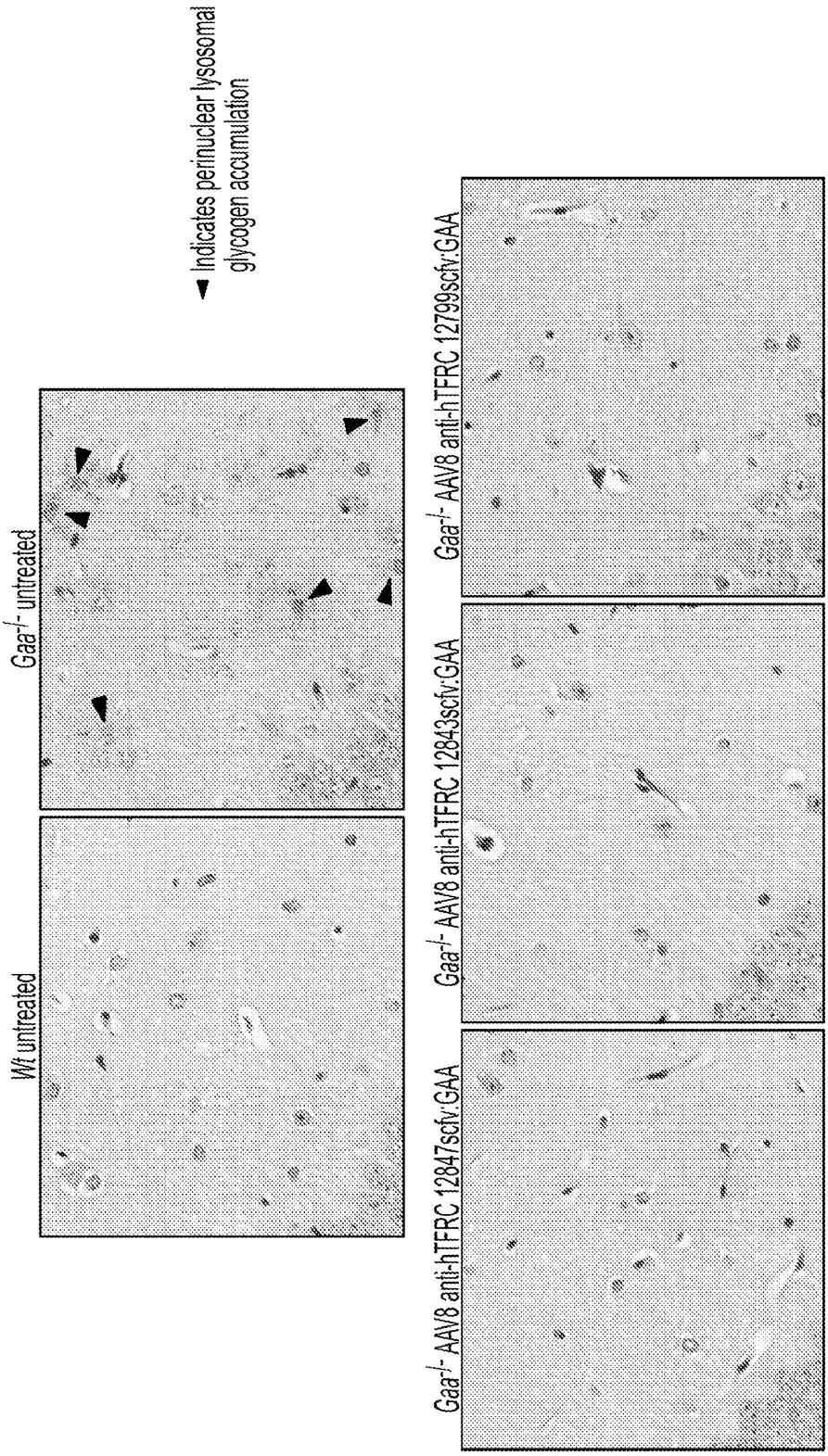

Indicates perinuclear lysosomal glycogen accumulation
Wt untreated
Gaa-/- untreated
Gaa-/- AAV8 anti-hTFRC 12847scfv:GAA
Gaa-/- AAV8 anti-hTFRC 12843scfv:GAA
Gaa-/- AAV8 anti-hTFRC 12799scfv:GAA

FIG. 6C

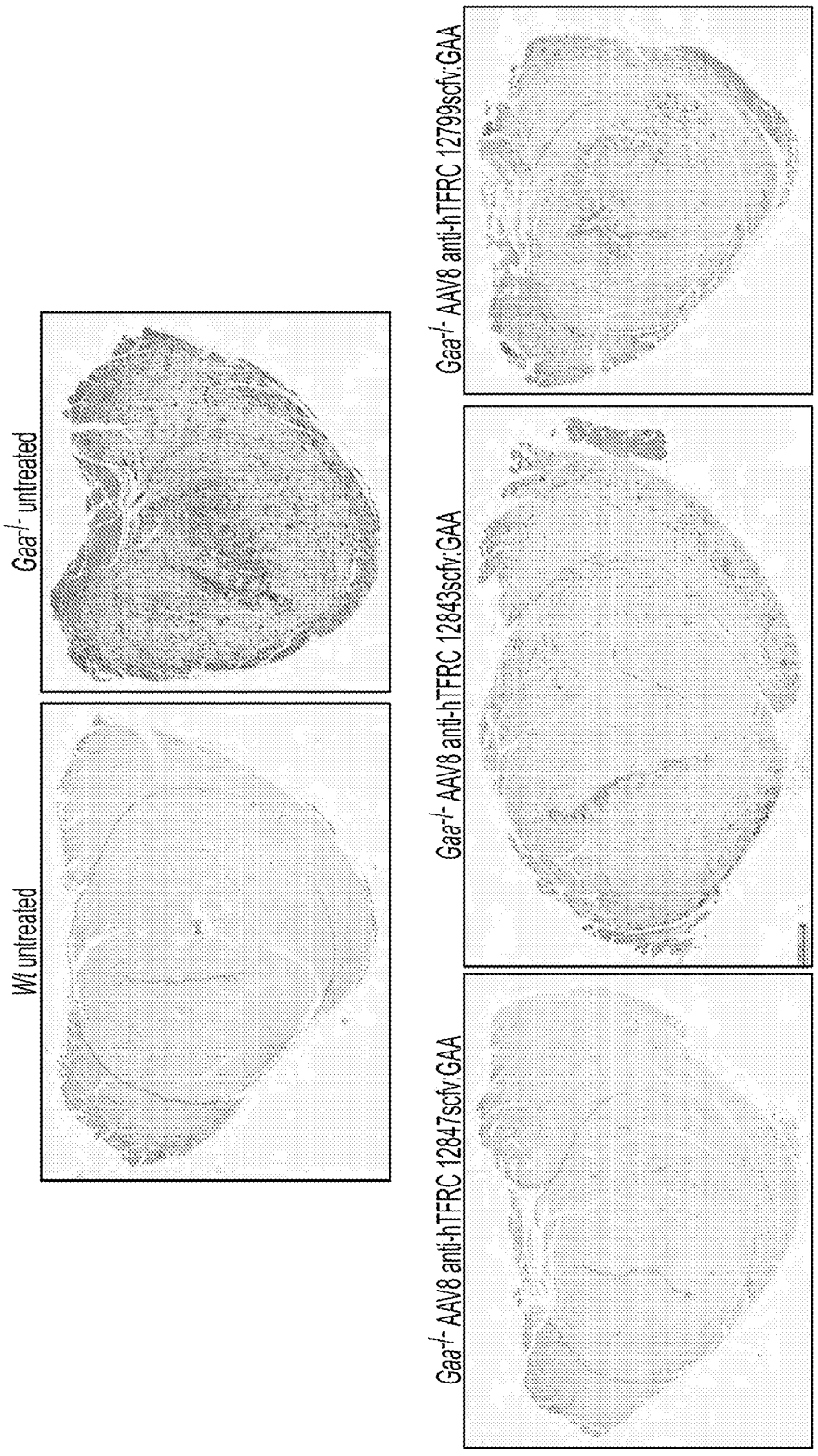

Wt untreated
Gaa-/- untreated
Gaa-/- AAV8 anti-hTFRC 12847scfv:GAA
Gaa-/- AAV8 anti-hTFRC 12843scfv:GAA
Gaa-/- AAV8 anti-hTFRC 12799scfv:GAA

FIG. 6D

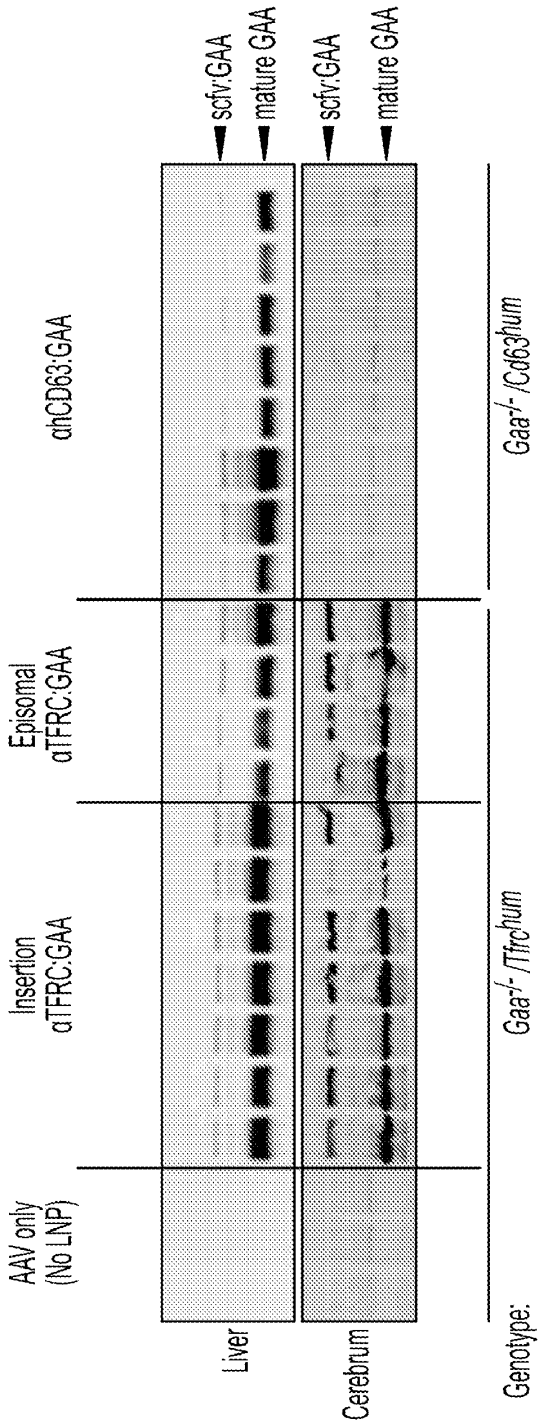

scfv:GAA
mature GAA
scfv:GAA
mature GAA
αhCD63:GAA
Episomal αTFRC:GAA
Insertion αTFRC:GAA
AAV only (No LNP)
Liver
Cerebrum
Genotype:
Gaa-/- /Tfrchum
Gaa-/- /Cd63hum

FIG. 7A

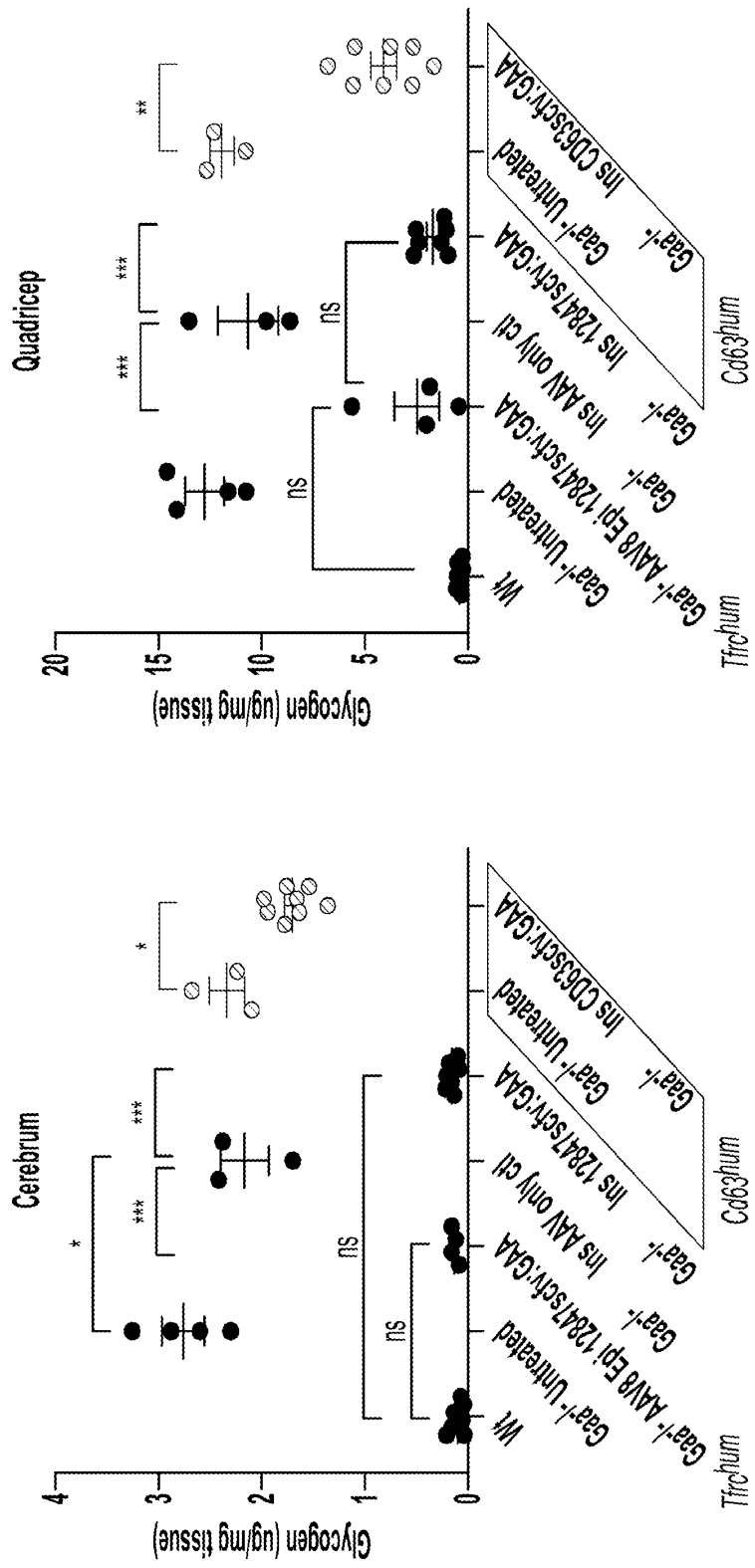

Quadricep
Glycogen (ug/mg tissue)
20
15
10
5
0
ns
ns
***
***
**
Wt
Gaa-/- Untreated
Gaa-/- AAV8 Epi 1284/Scfv:GAA
Gaa-/-
Gaa-/-
Gaa-/-
Gaa-/- Untreated
Gaa-/-
Tfrc hum
Cd63 hum
ins AAV only cil
ins 1284/Scfv:GAA
ins CD63Scfv:GAA
Cerebrum
Glycogen (ug/mg tissue)
4
3
2
1
0
ns
ns
*
***
***
*
Wt
Gaa-/- Untreated
Gaa-/- AAV8 Epi 1284/Scfv:GAA
Gaa-/-
Gaa-/-
Gaa-/-
Gaa-/- Untreated
Gaa-/-
Tfrc hum
Cd63 hum
ins AAV only cil
ins 1284/Scfv:GAA
ins CD63Scfv:GAA

FIG. 7B

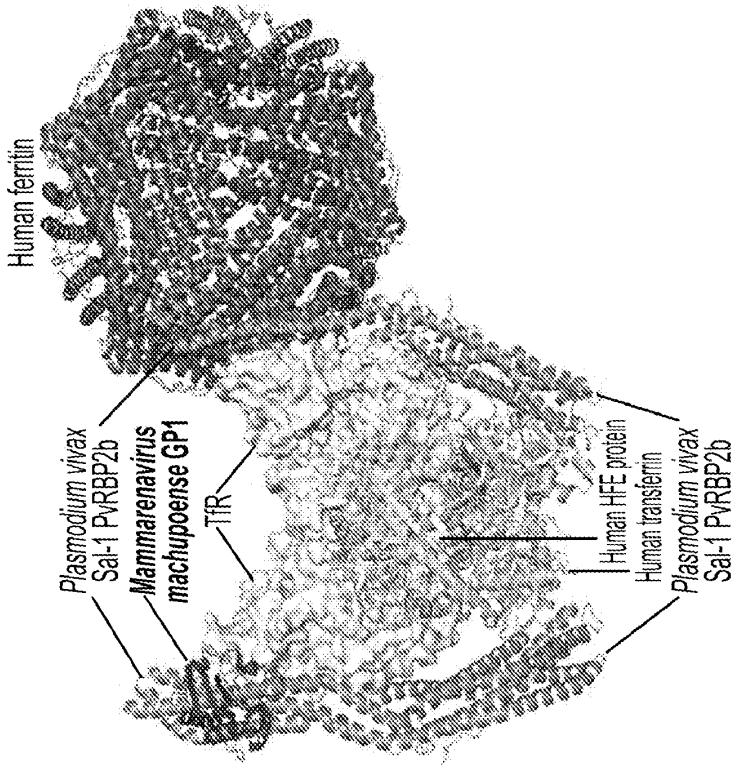

Human ferritin
Plasmodium vivax Sal-1 PvRBP2b
Mammarenavirus machupoense GP1
TfR
Human HFE protein
Human transferrin
Plasmodium vivax Sal-1 PvRBP2b

FIG. 8

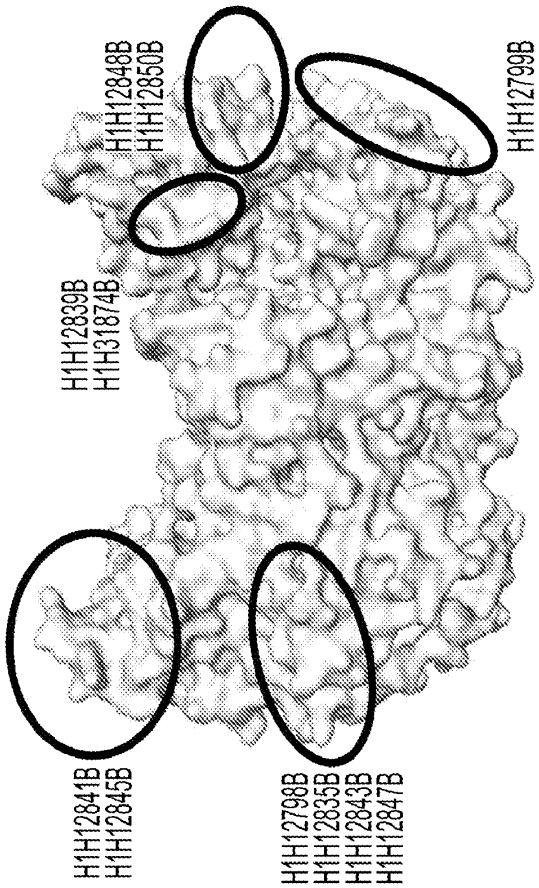

H1H12848B
H1H12850B
H1H12799B
H1H12839B
H1H31874B
H1H12841B
H1H12845B
H1H12798B
H1H12835B
H1H12843B
H1H12847B

FIG. 9

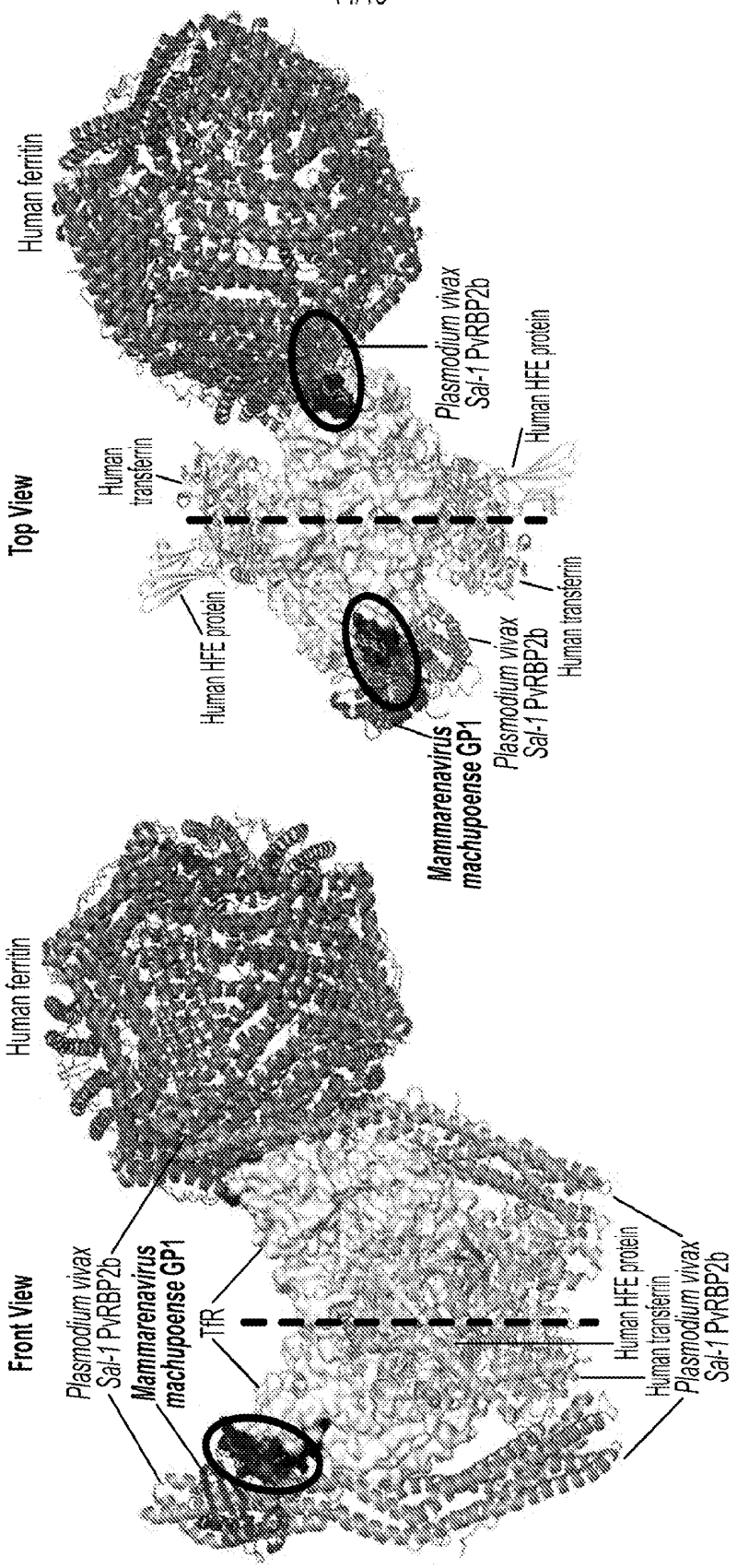

Front View
Human ferritin
Plasmodium vivax Sal-1 PvRBP2b
Mammarenavirus machupoense GP1
TfR
Human HFE protein
Human transferrin
Plasmodium vivax Sal-1 PvRBP2b
Top View
Human ferritin
Human transferrin
Human HFE protein
Plasmodium vivax Sal-1 PvRBP2b
Human HFE protein
Human transferrin
Mammarenavirus machupoense GP1
Plasmodium vivax Sal-1 PvRBP2b

FIG. 10

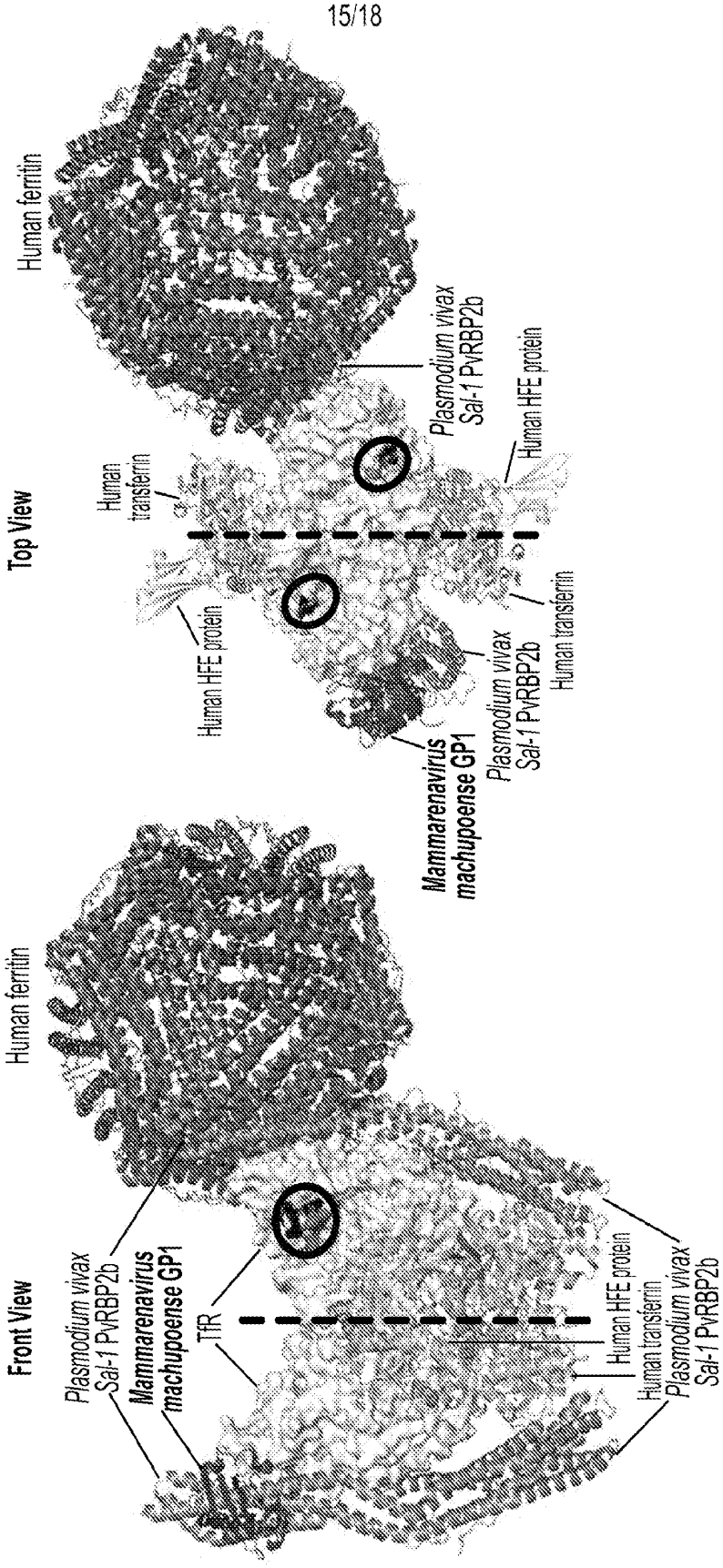

Top View
Human ferritin
Human transferrin
Human HFE protein
Plasmodium vivax Sal-1 PvRBP2b
Mammarenavirus machupoense GP1
Front View
Human ferritin
Plasmodium vivax Sal-1 PvRBP2b
Mammarenavirus machupoense GP1
TfR
Human HFE protein
Human transferrin
Plasmodium vivax Sal-1 PvRBP2b

FIG. 11

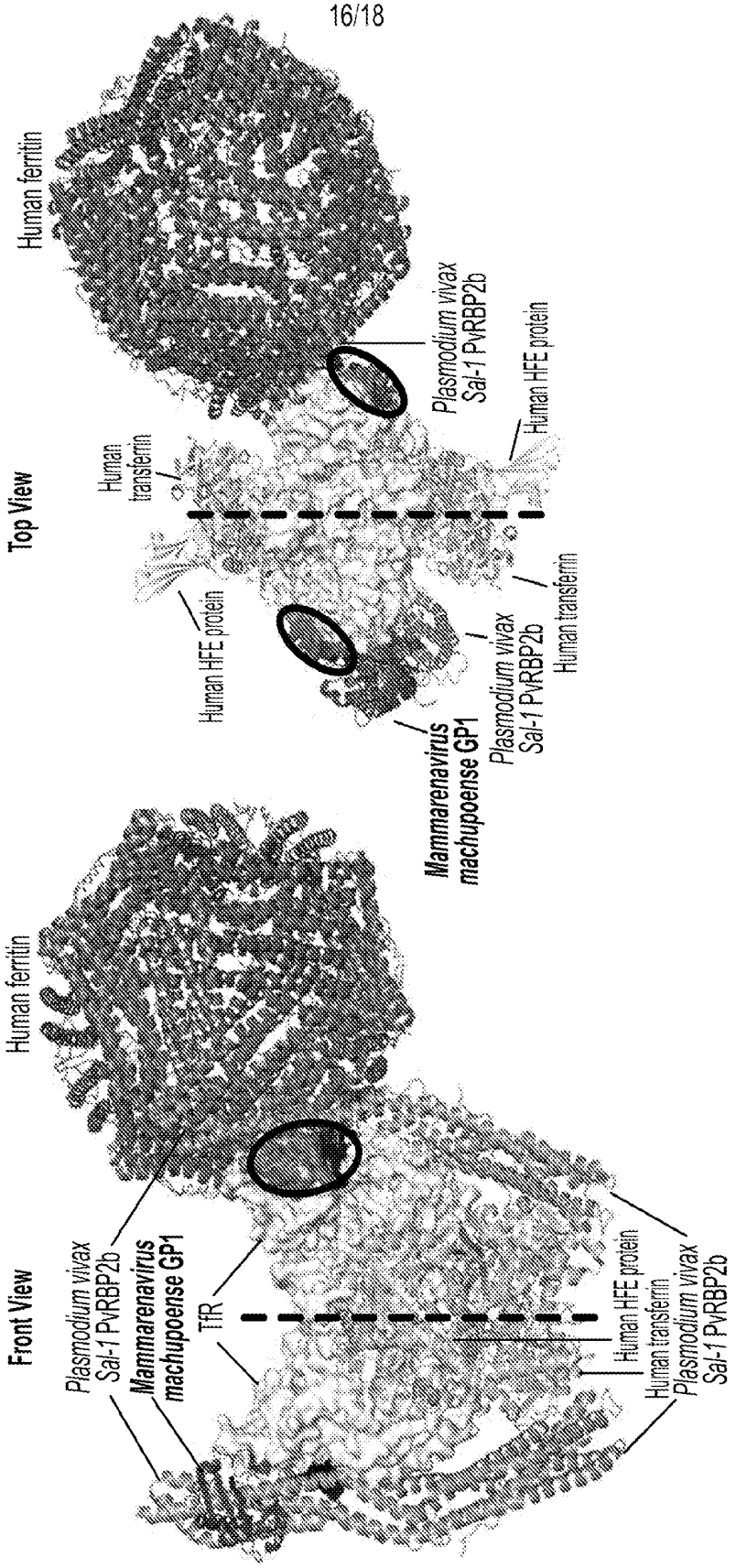

Top View
Human ferritin
Human transferrin
Human HFE protein
Plasmodium vivax Sal-1 PvRBP2b
Mammarenavirus machupoense GP1
Front View
Human ferritin
Plasmodium vivax Sal-1 PvRBP2b
Mammarenavirus machupoense GP1
TfR
Human HFE protein
Human transferrin
Plasmodium vivax Sal-1 PvRBP2b

FIG. 12

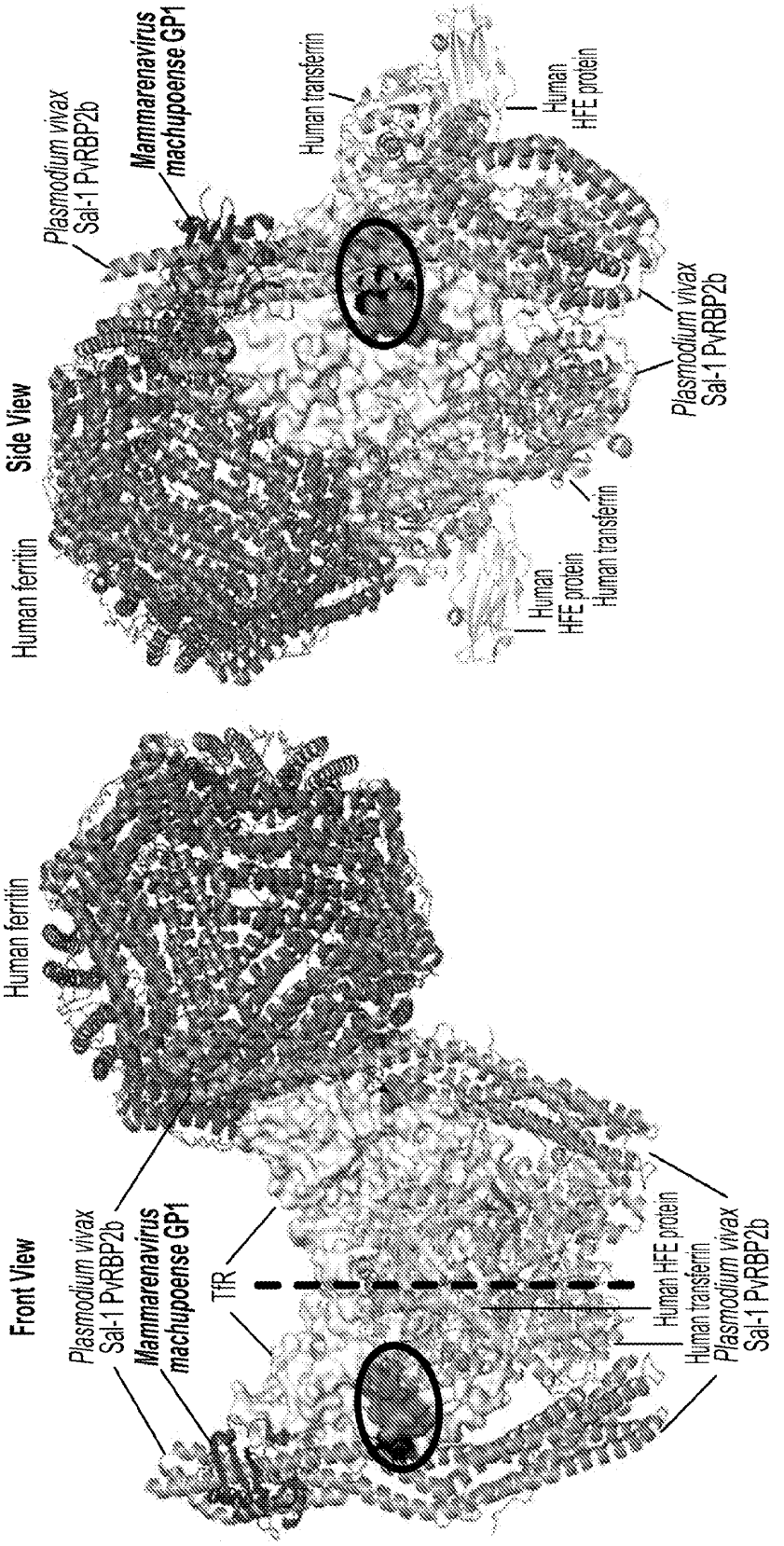

Side View
Human ferritin
Plasmodium vivax Sal-1 PvRBP2b
Mammarenavirus machupoense GP1
Human transferrin
Human HFE protein
Human HFE protein
Human transferrin
Plasmodium vivax Sal-1 PvRBP2b
Front View
Human ferritin
Plasmodium vivax Sal-1 PvRBP2b
Mammarenavirus machupoense GP1
TfR
Human HFE protein
Human transferrin
Plasmodium vivax Sal-1 PvRBP2b

FIG. 13

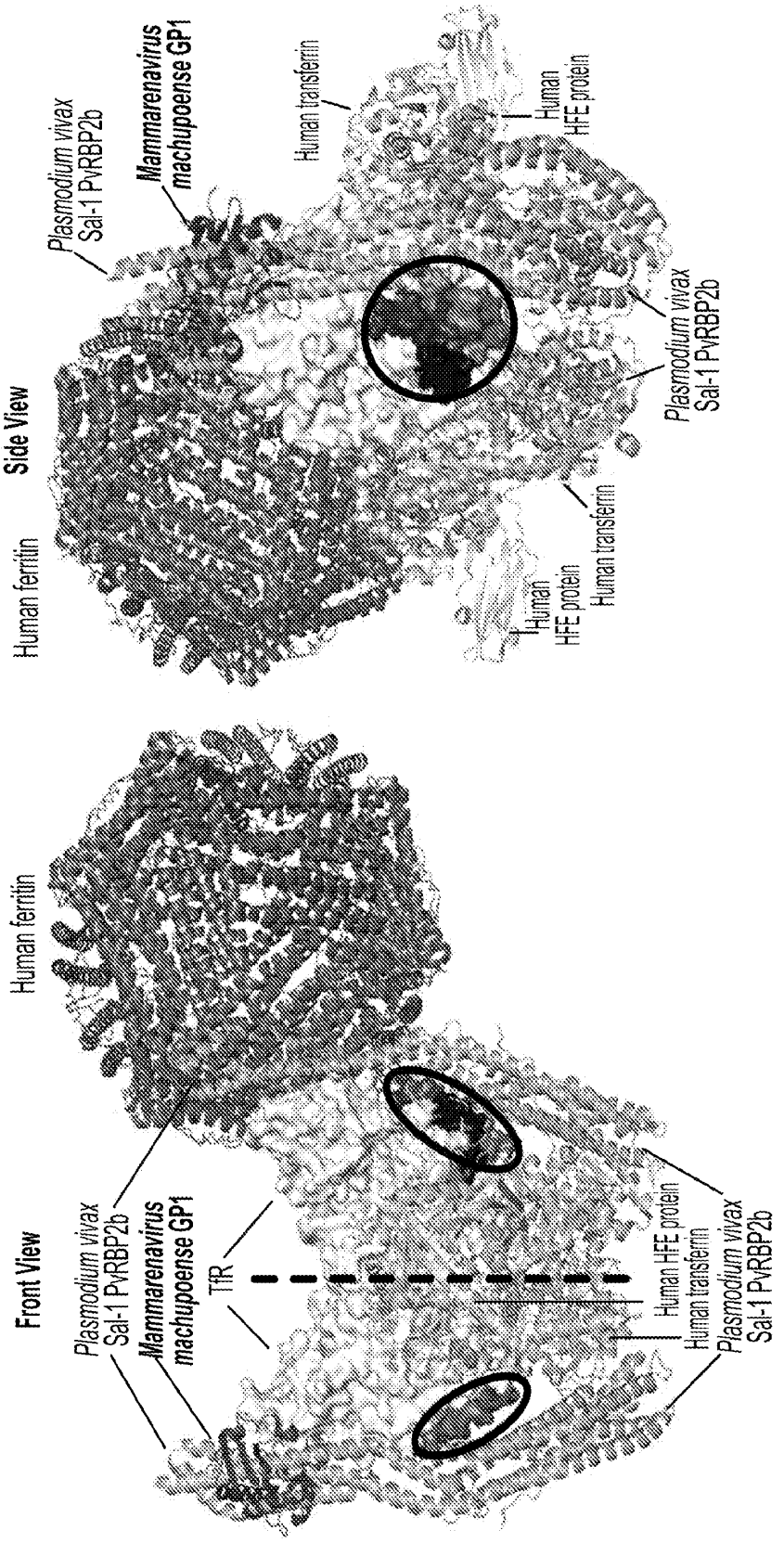

Side View
Human ferritin
Plasmodium vivax Sal-1 PvRBP2b
Mammarenavirus machupoense GP1
Human transferrin
Human HFE protein
Human HFE protein
Human transferrin
Plasmodium vivax Sal-1 PvRBP2b
Front View
Human ferritin
Plasmodium vivax Sal-1 PvRBP2b
Mammarenavirus machupoense GP1
TfR
Human HFE protein
Human transferrin
Plasmodium vivax Sal-1 PvRBP2b

FIG. 14