FIG 1A

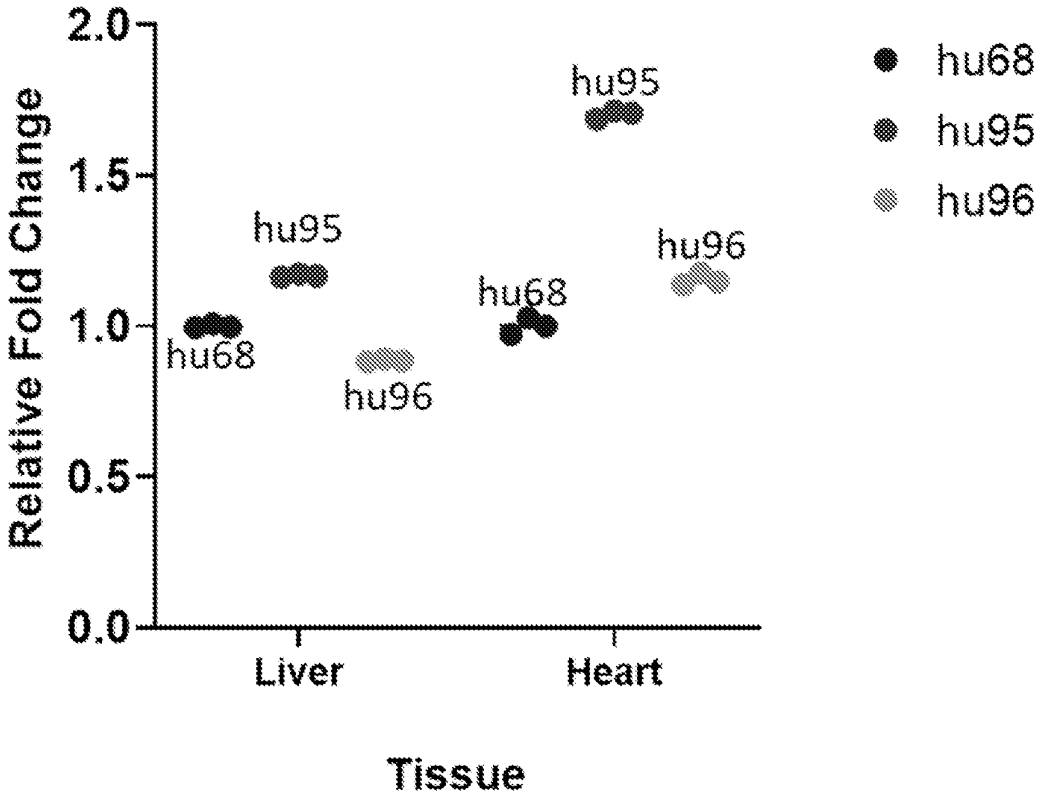

Relative Fold Change
2.0
1.5
1.0
0.5
0.0
hu68
hu95
hu96
hu95
hu68
hu96
hu68
hu95
hu96
Liver
Heart
Tissue

FIG 1B

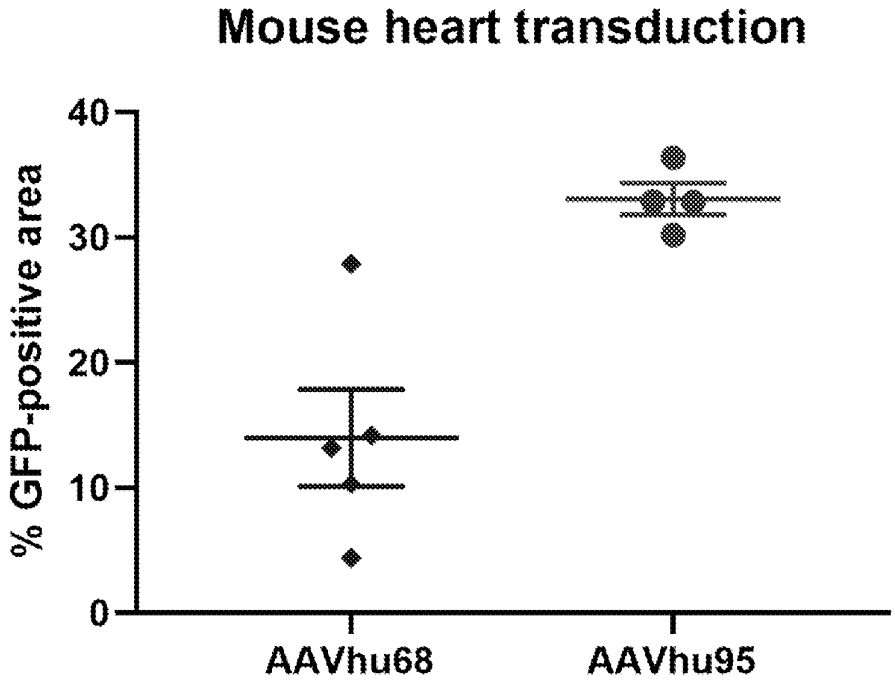

Mouse heart transduction
% GFP-positive area
40
30
20
10
0
AAVhu68
AAVhu95

FIG 1C

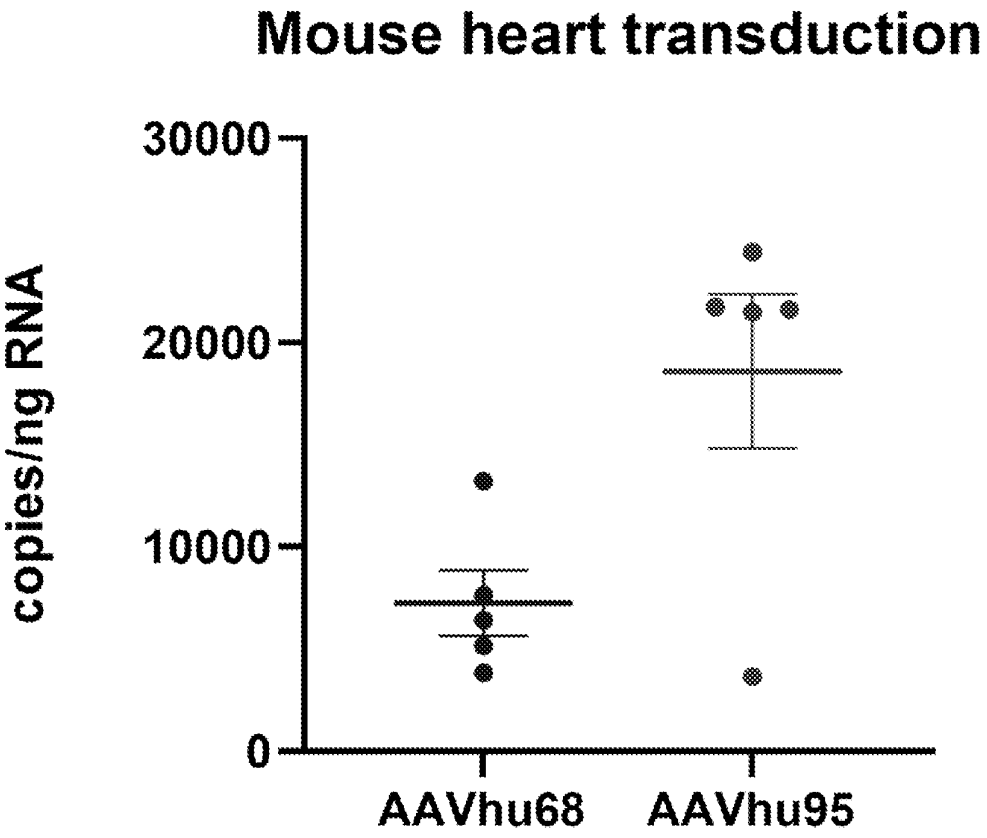

Mouse heart transduction
copies/ng RNA
30000
20000
10000
0
AAVhu68
AAVhu95

FIG 2A

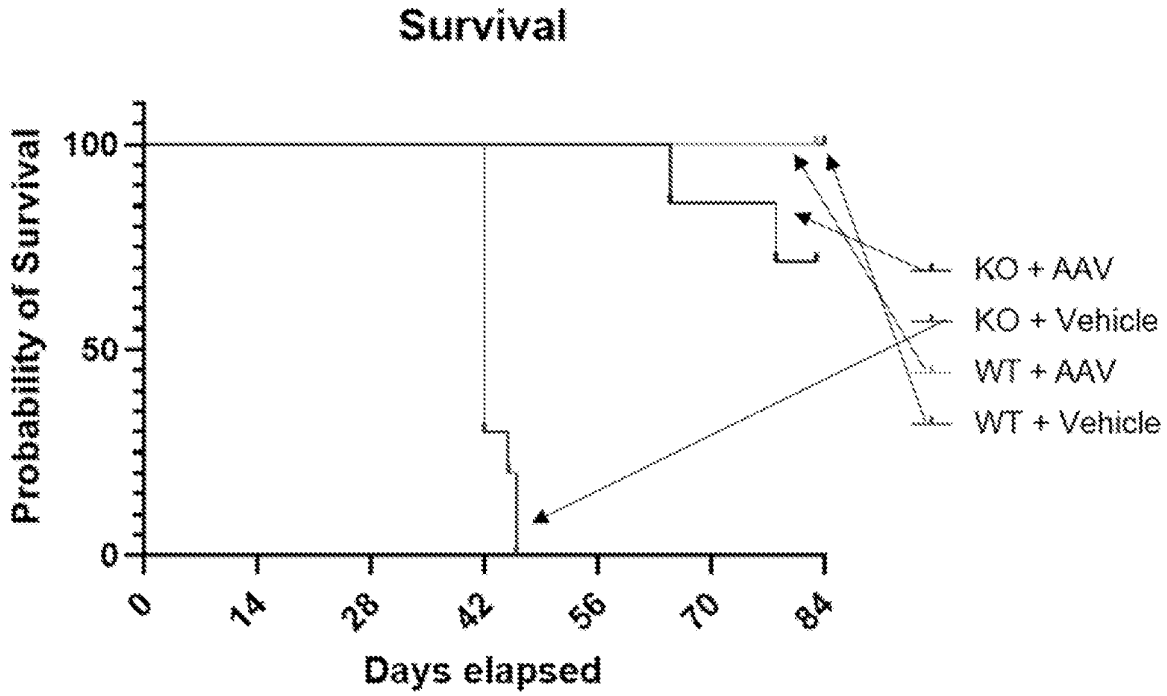

Survival
Probability of Survival
100
50
0
0
14
28
42
56
70
84
Days elapsed
KO + AAV
KO + Vehicle
WT + AAV
WT + Vehicle

FIG 2B

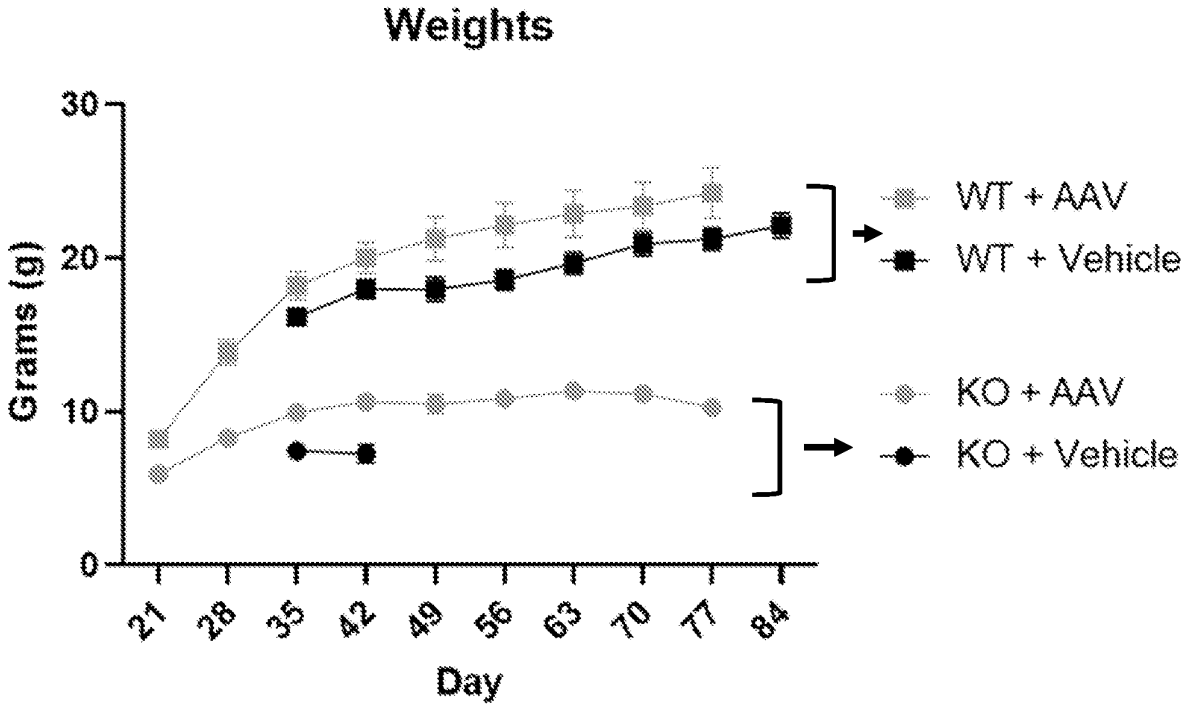

Weights
Grams (g)
30
20
10
0
21
28
35
42
49
56
63
70
77
84
Day
WT + AAV
WT + Vehicle
KO + AAV
KO + Vehicle

FIG 2C

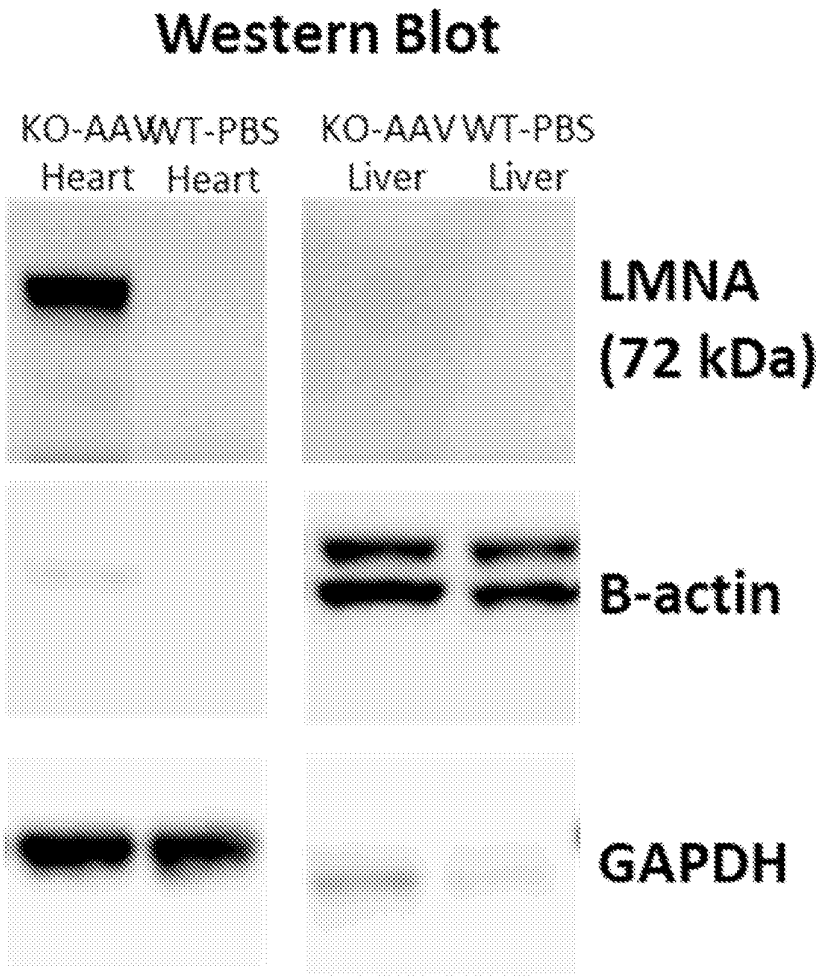

Western Blot
KO-AAV Heart
WT-PBS Heart
KO-AAV Liver
WT-PBS Liver
LMNA
(72 kDa)
B-actin
GAPDH

FIG 3A

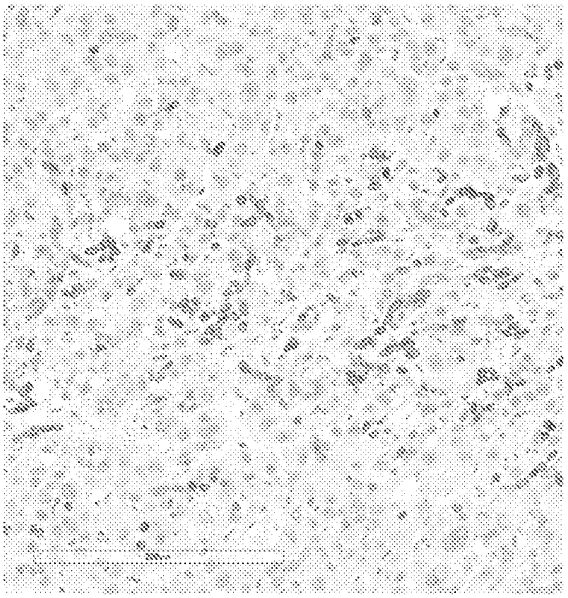


FIG 3B



FIG 3C

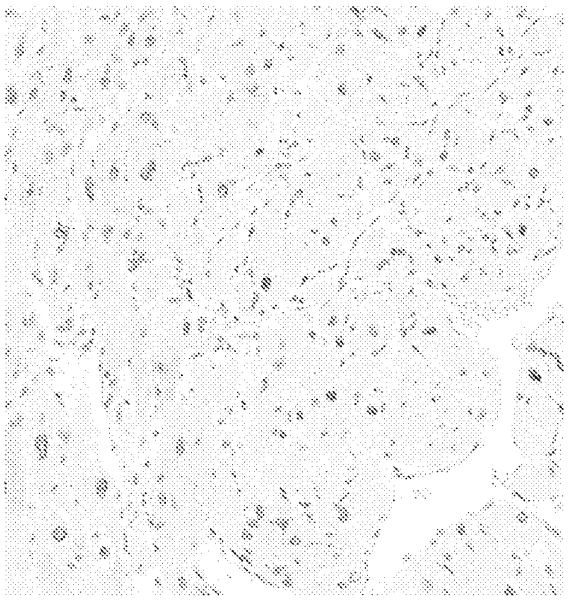


FIG 4A

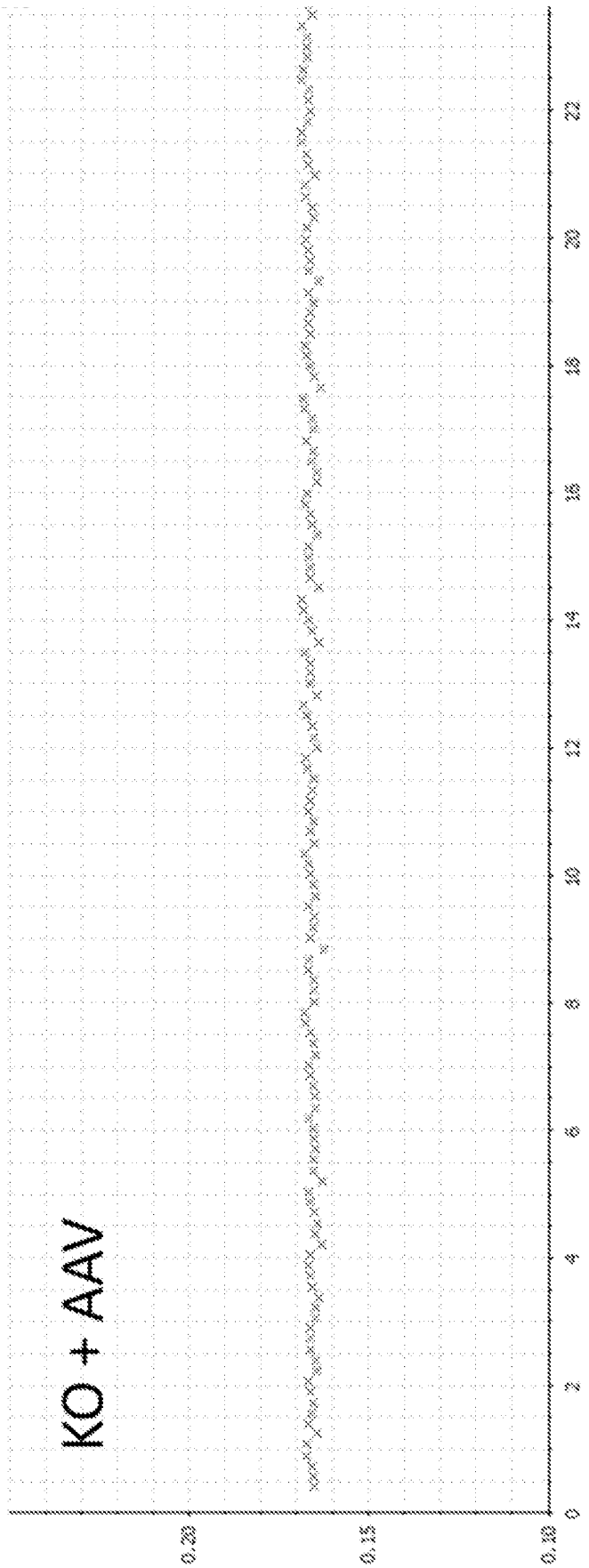


FIG 4B

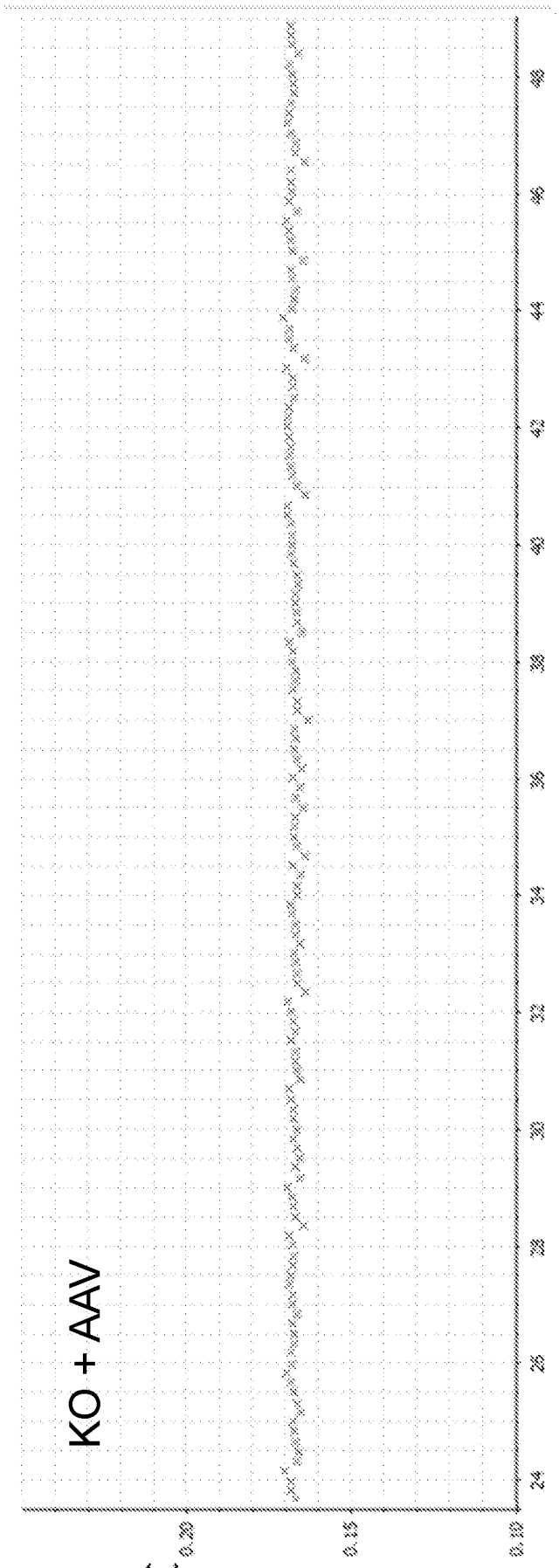

KO + AAV
RR interval (s)
0.20
0.15
0.10
24
26
28
30
32
34
36
38
40
42
44
46
48

FIG 4C

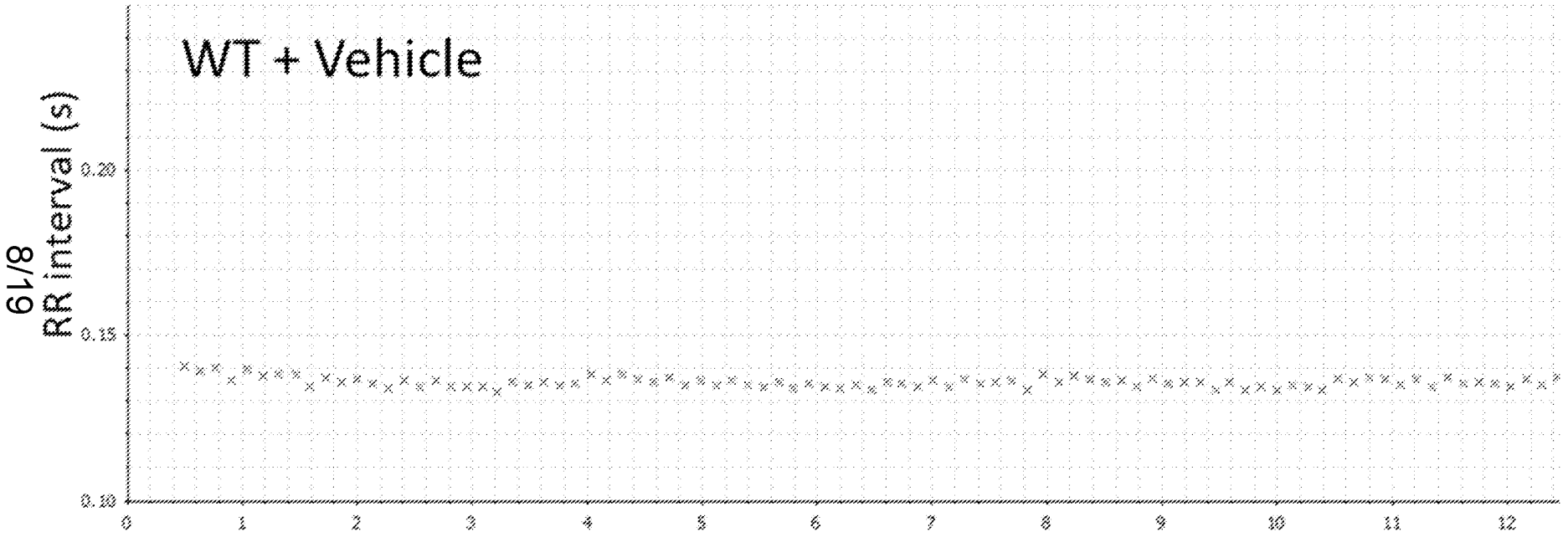


FIG 4D

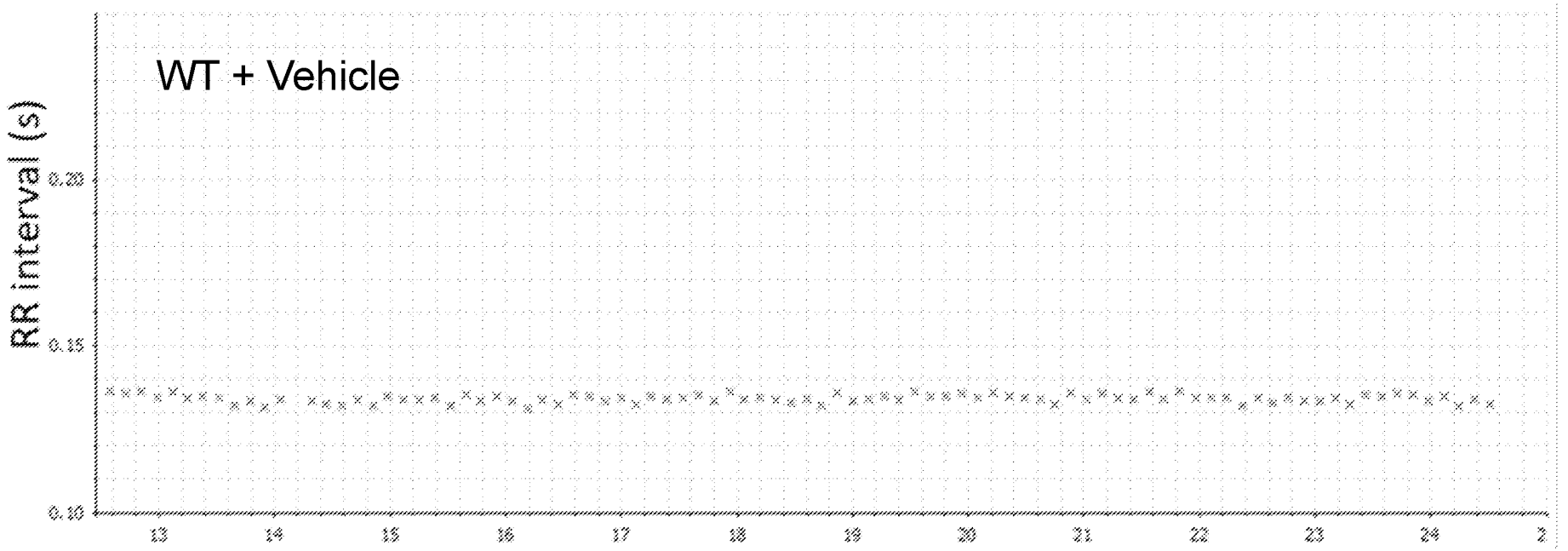

WT + Vehicle
RR interval (s)
0.20
0.15
0.10
13
14
15
16
17
18
19
20
21
22
23
24
2

FIG 5A

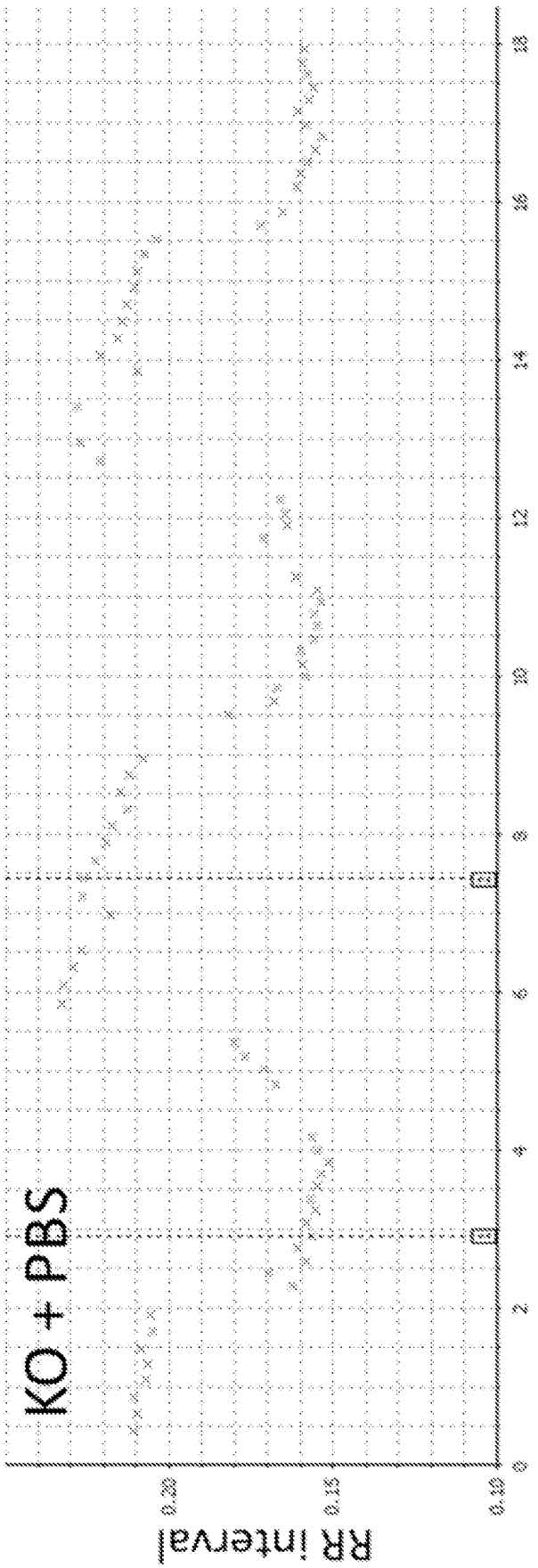


FIG 5B

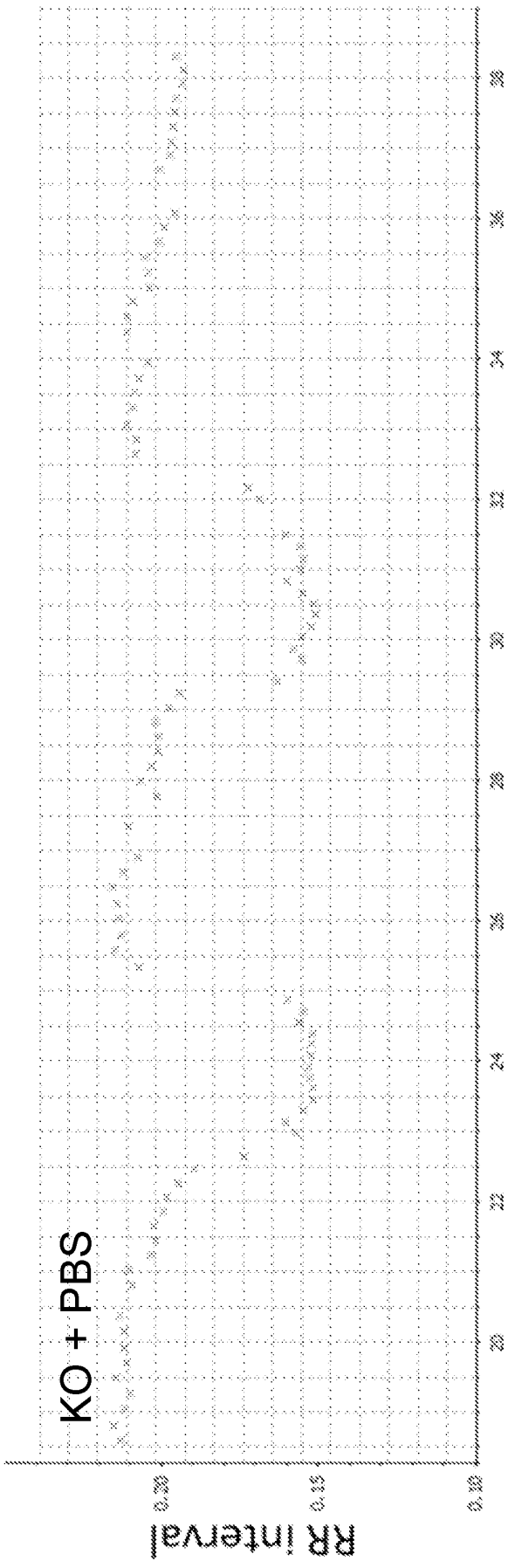


FIG 5C

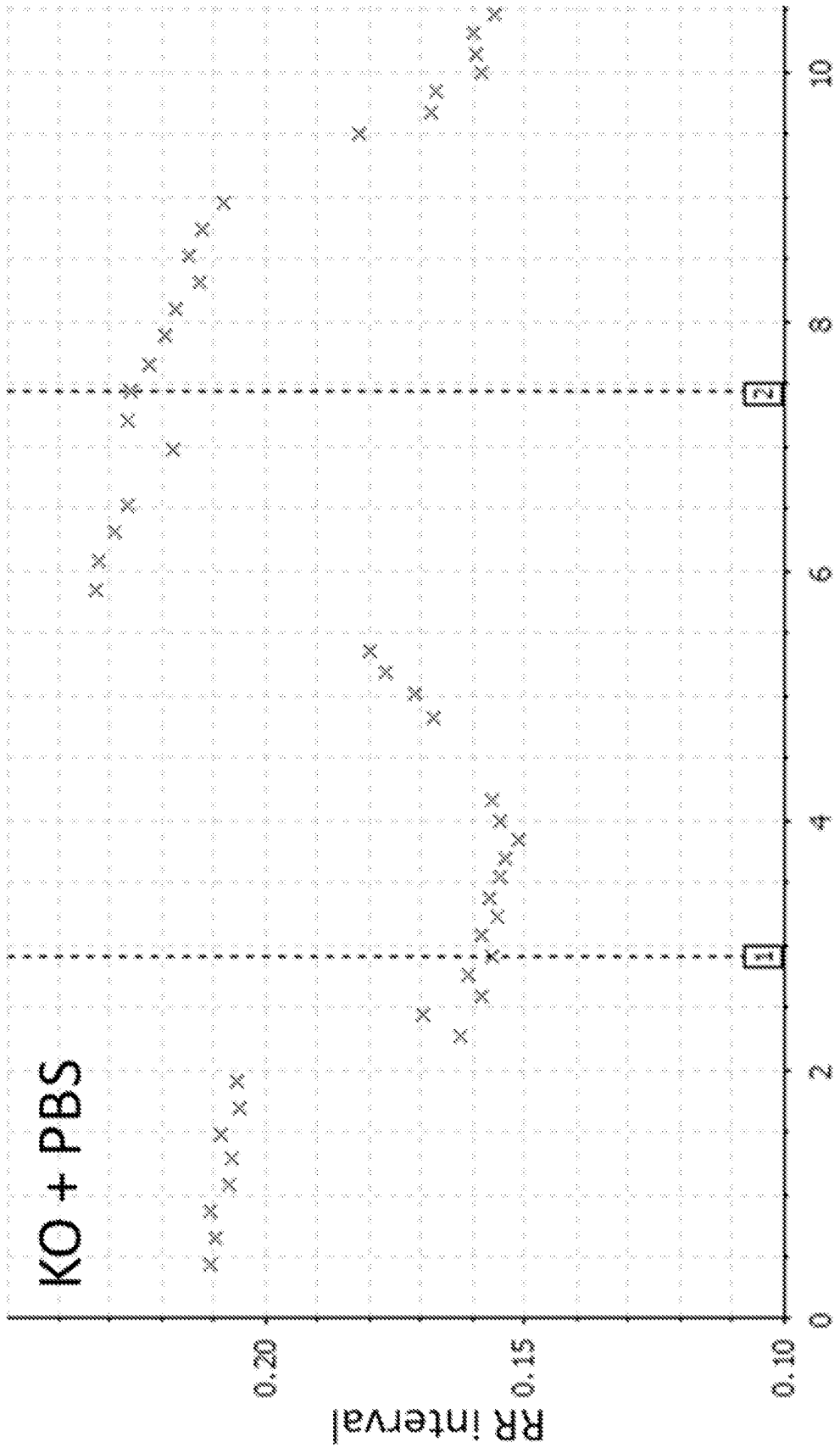


FIG 5D

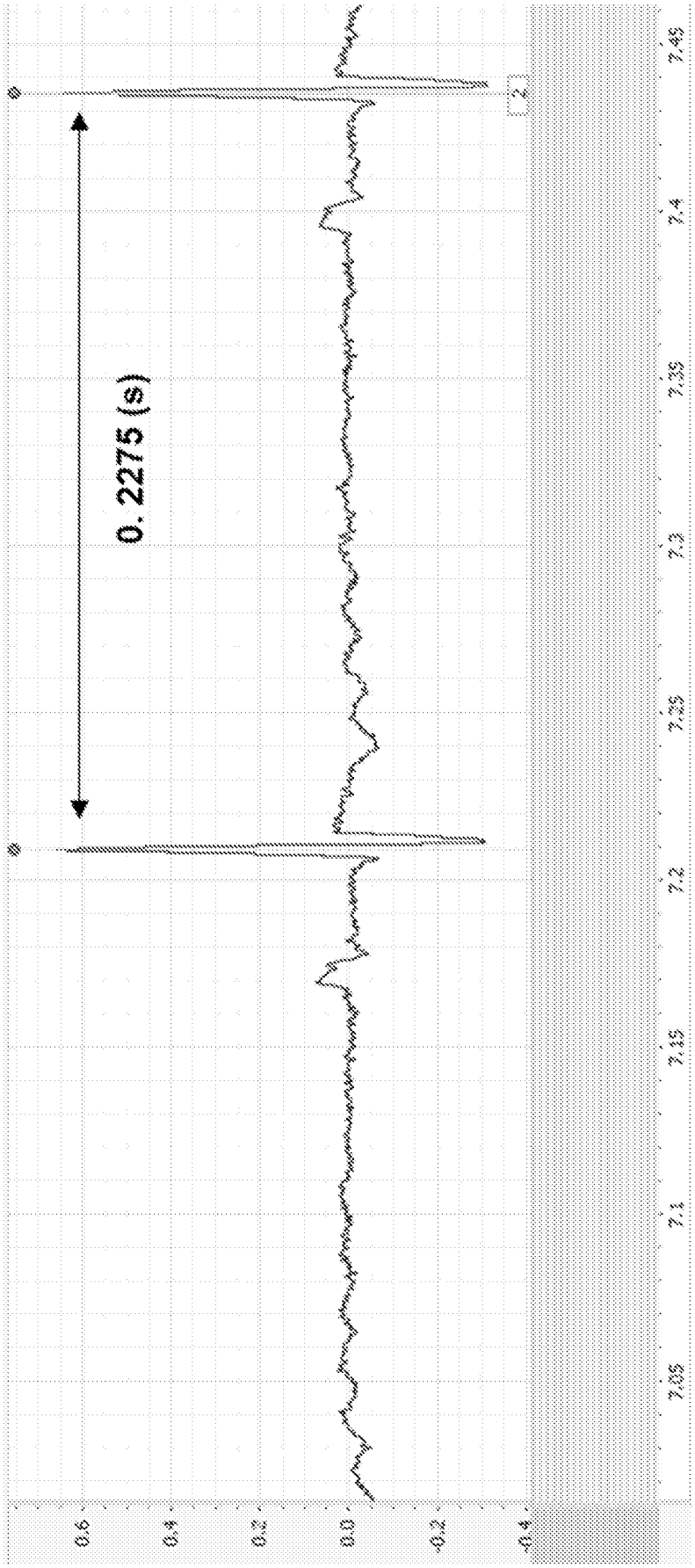


FIG 6A

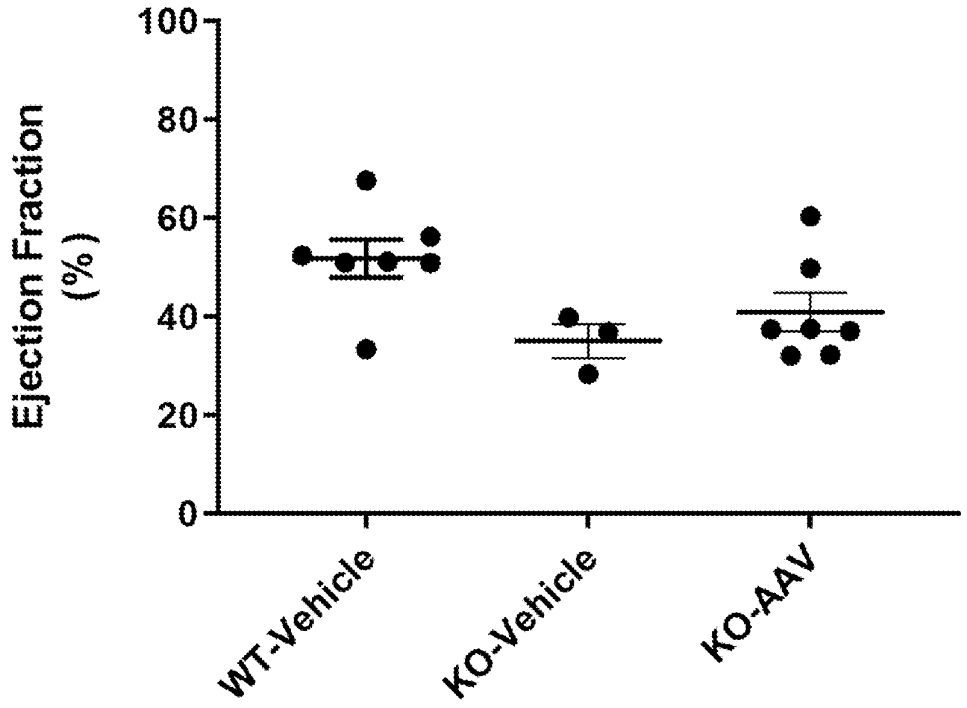

Ejection Fraction (%)
100
80
60
40
20
0
WT-Vehicle
KO-Vehicle
KO-AAV

FIG 6B

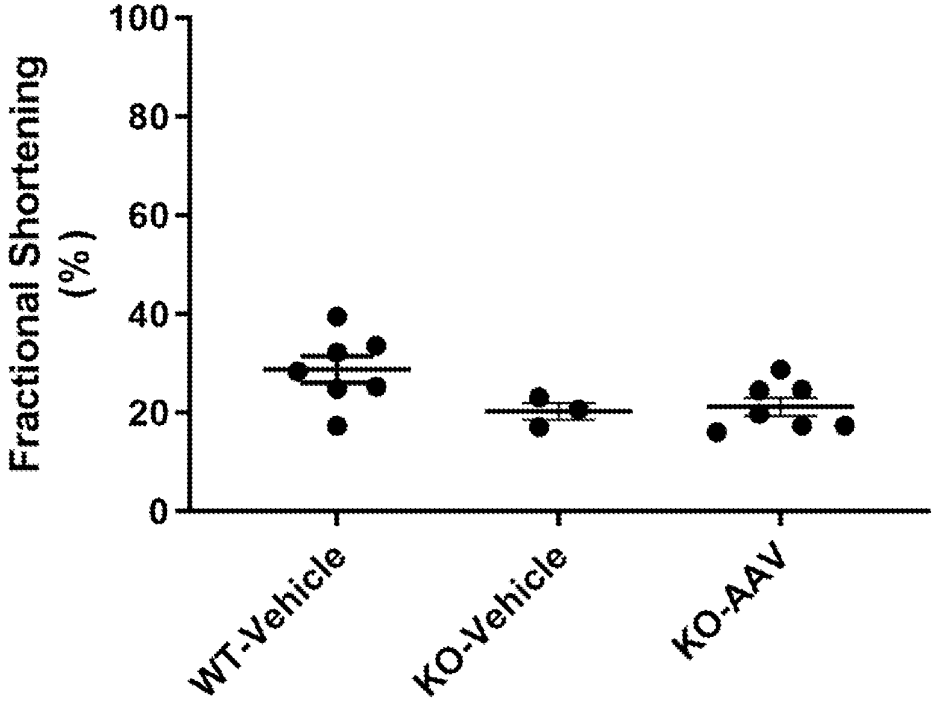

Fractional Shortening (%)
100
80
60
40
20
0
WT-Vehicle
KO-Vehicle
KO-AAV

FIG 6C

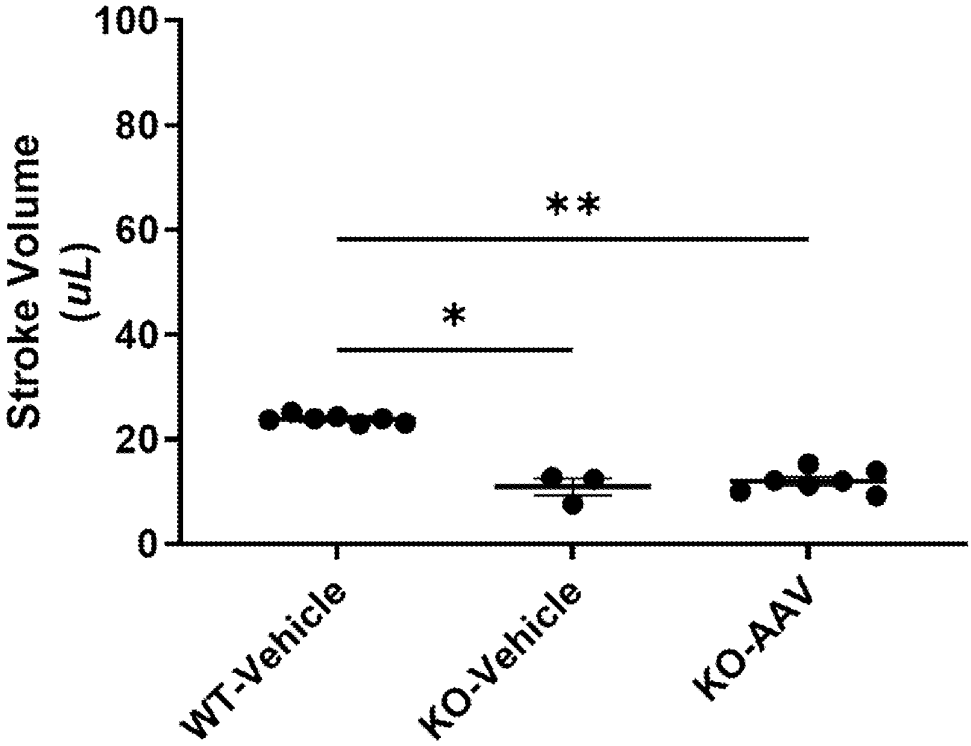


FIG 7A

KO + PBS, Mouse 130 Heart

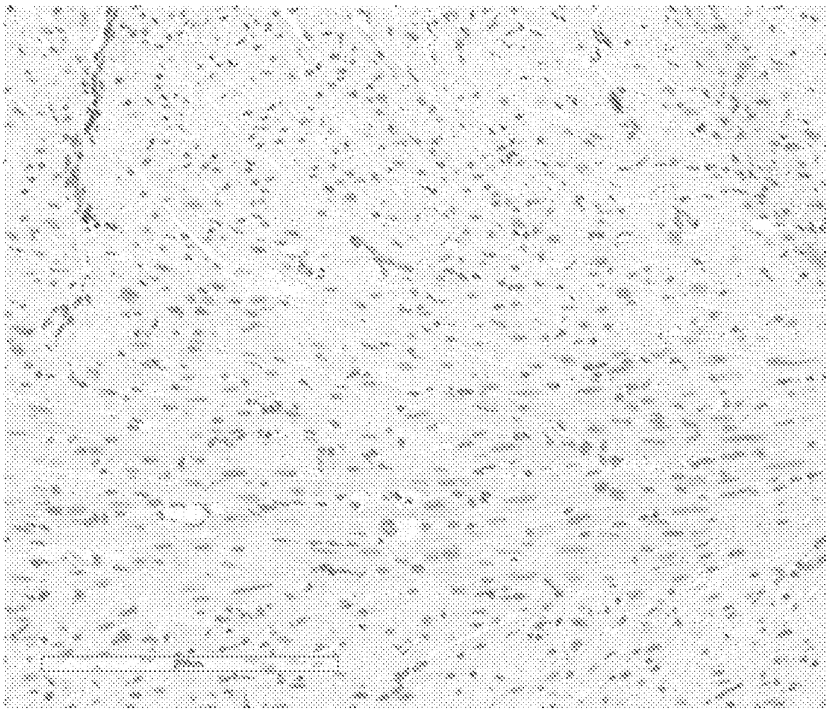


FIG 7B

KO + AAV, Mouse 227 Heart

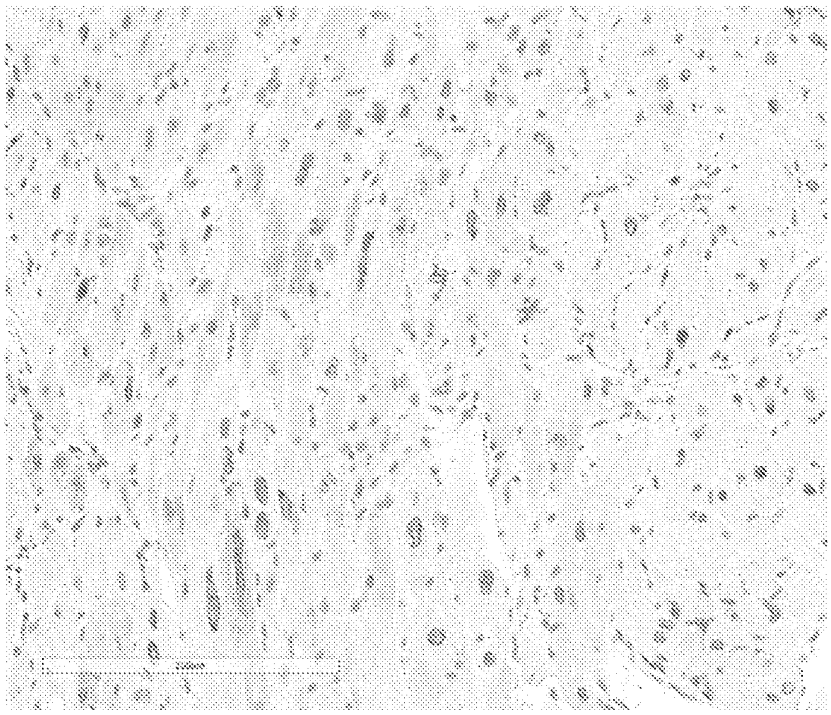


FIG 8

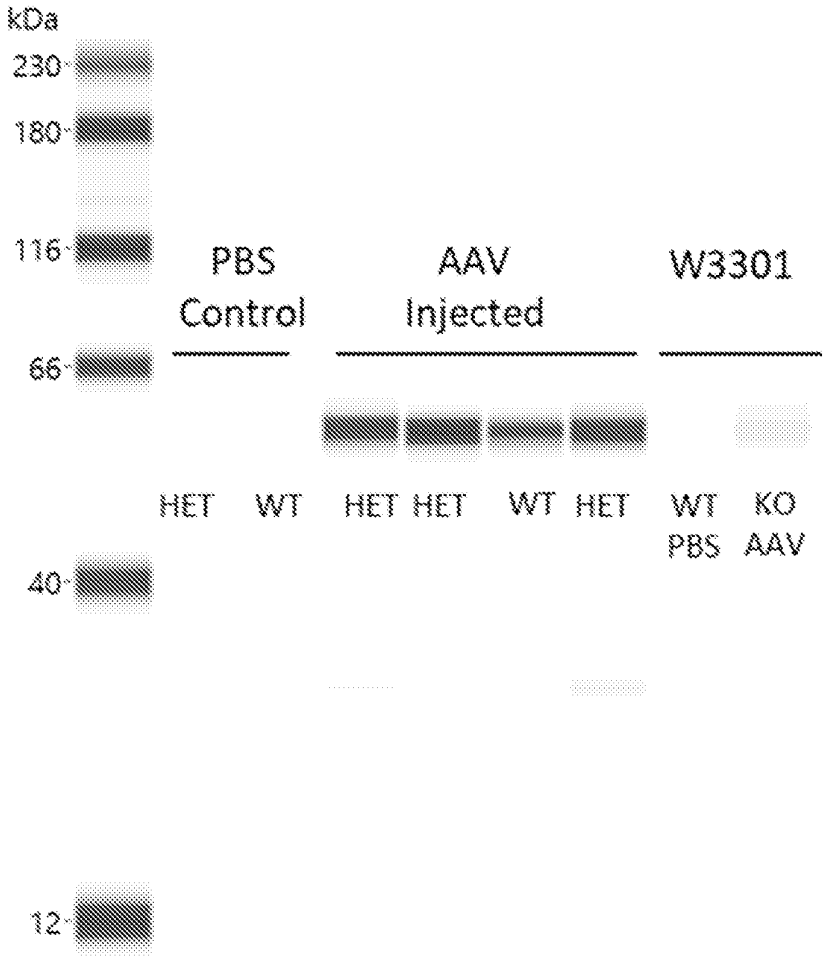

kDa
230
180
116
66
40
12
PBS Control
AAV Injected
W3301
HET
WT
HET
HET
WT
HET
WT PBS
KO AAV

FIG 9A

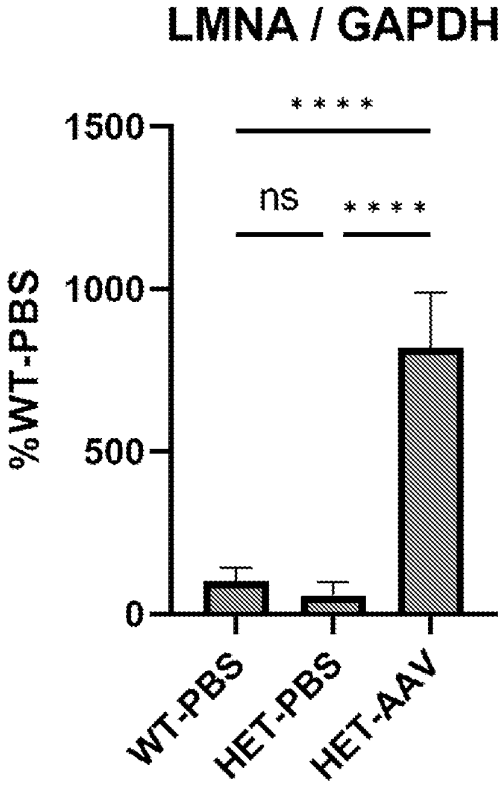

LMNA / GAPDH
%WT-PBS
1500
1000
500
0
* * * *
ns
* * * *
WT-PBS
HET-PBS
HET-AAV

FIG 9B

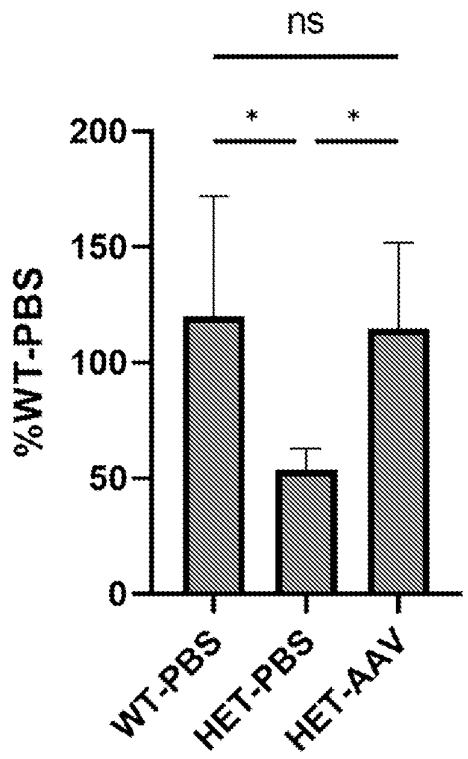
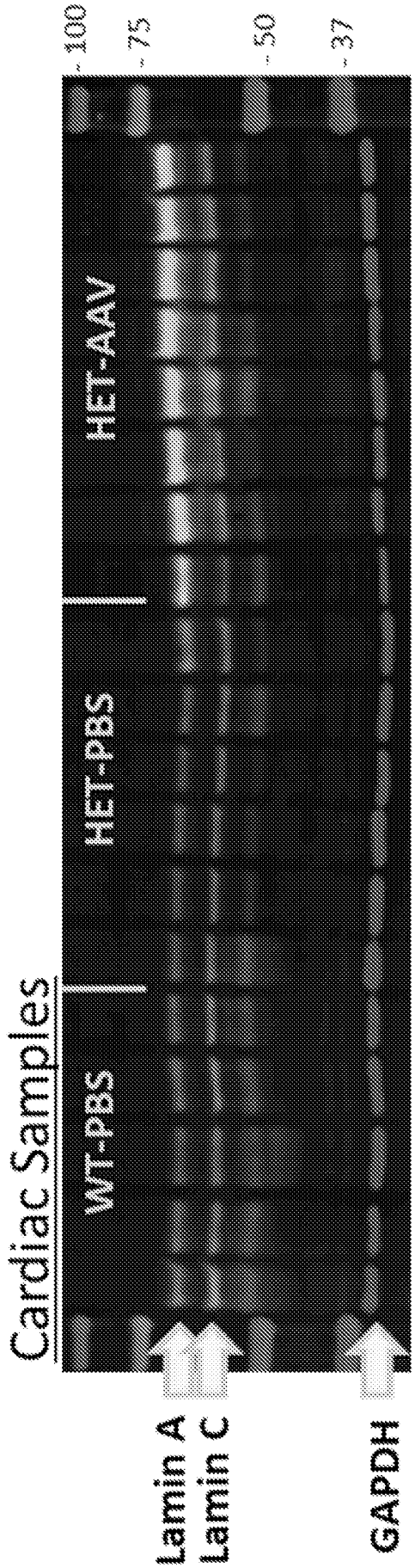

LMNC / GAPDH
%WT-PBS
200
150
100
50
0
ns
*
*
WT-PBS
HET-PBS
HET-AAV

FIG 9C


Cardiac Samples
WT-PBS
HET-PBS
HET-AAV
100
75
50
37
Lamin A
Lamin C
GAPDH