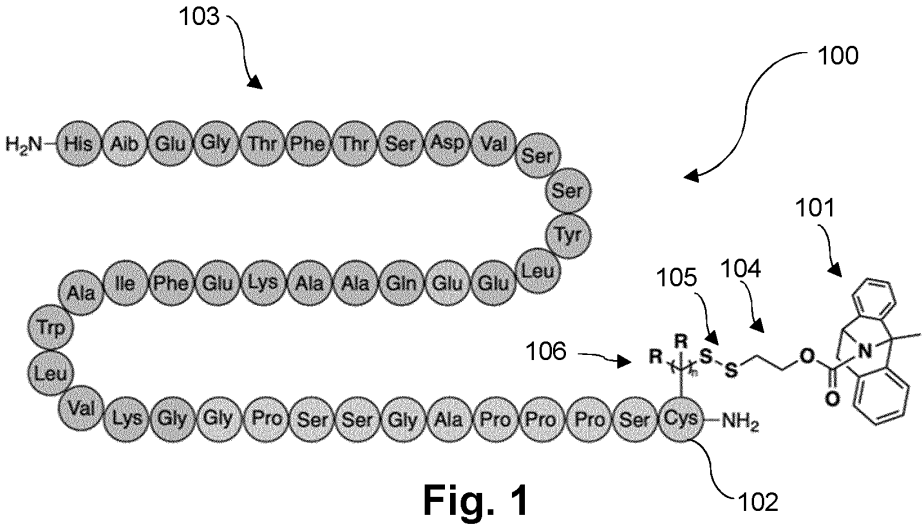
103
100
101
105
104
106
102
H_2N
His
Aib
Glu
Gly
Thr
Phe
Thr
Ser
Asp
Val
Ser
Ser
Tyr
Leu
Ala
Ile
Phe
Glu
Lys
Ala
Ala
Gln
Glu
Glu
Trp
Leu
Val
Lys
Gly
Gly
Pro
Ser
Ser
Gly
Ala
Pro
Pro
Pro
Ser
Cys
NH_2
R
S
n
O
N

Fig. 1

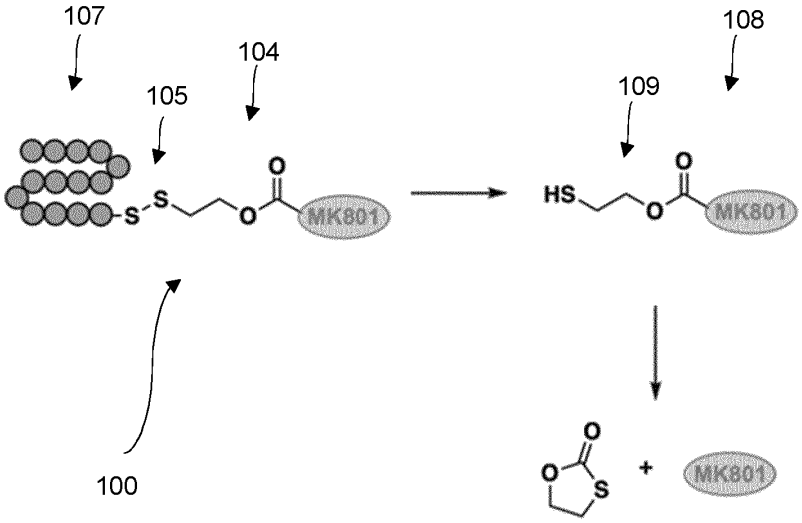
107
104
105
108
109
S
O
MK801
HS
100
+

Fig. 2

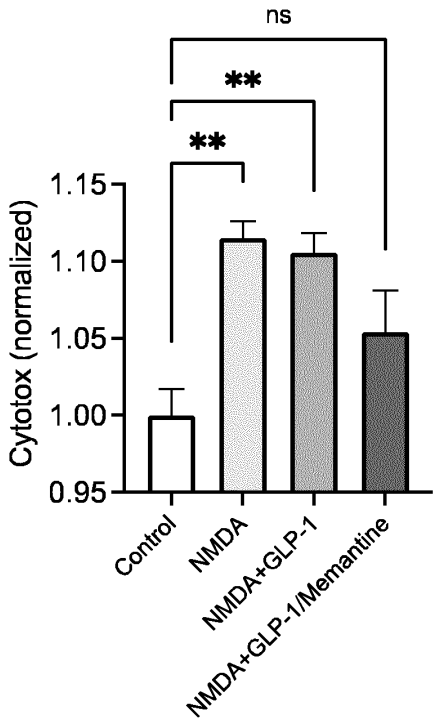
ns
**
**
Cytotox (normalized)
1.15
1.10
1.05
1.00
0.95
Control
NMDA
NMDA+GLP-1
NMDA+GLP-1/Memantine

Fig. 3

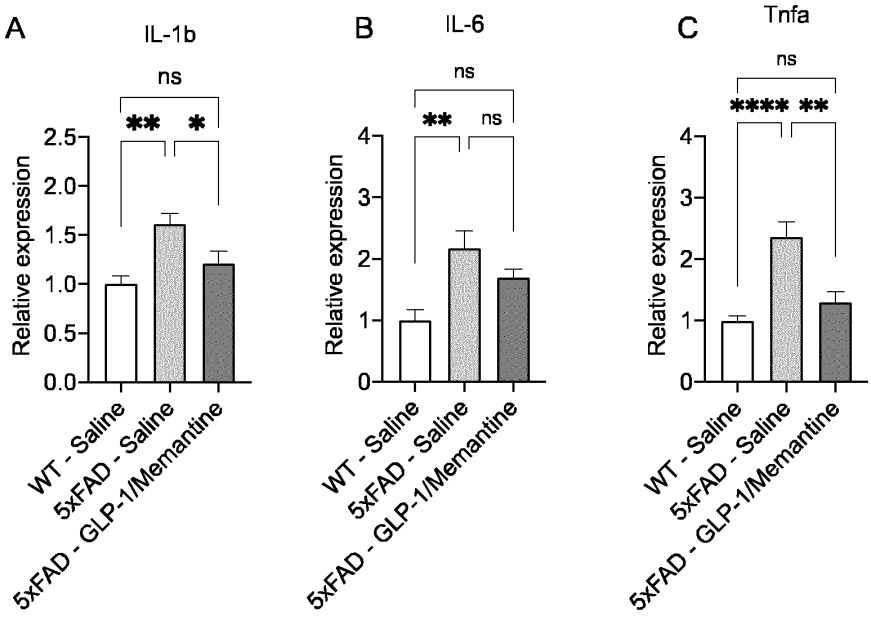
A
IL-1b
ns
** *
Relative expression
2.5
2.0
1.5
1.0
0.5
0.0
WT - Saline
5xFAD - Saline
5xFAD - GLP-1/Memantine
B
IL-6
ns
** ns
Relative expression
4
3
2
1
0
WT - Saline
5xFAD - Saline
5xFAD - GLP-1/Memantine
C
Tnfa
ns
**** **
Relative expression
4
3
2
1
0
WT - Saline
5xFAD - Saline
5xFAD - GLP-1/Memantine

Fig. 4

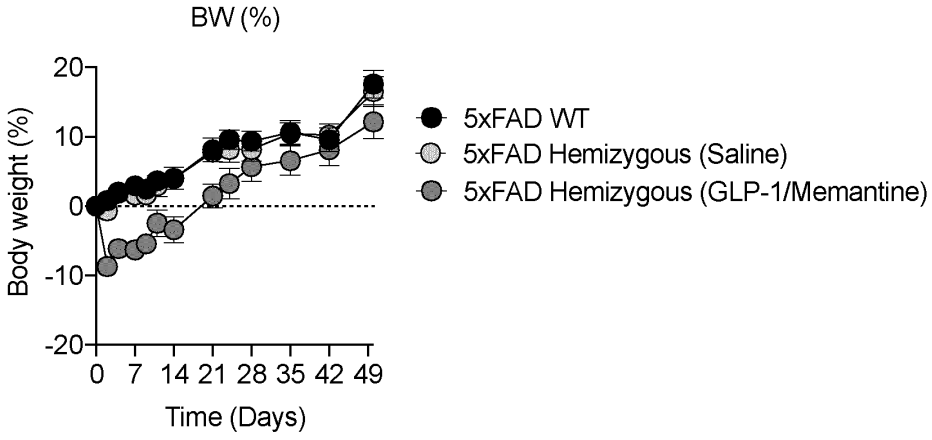
BW (%)
Body weight (%)
20
10
0
-10
-20
0 7 14 21 28 35 42 49
Time (Days)
5xFAD WT
5xFAD Hemizygous (Saline)
5xFAD Hemizygous (GLP-1/Memantine)

Fig. 5

GLP-1/GIP	YX_1EGT FTSDY SIYLD KQAAX_1 EFVNW LLAGG PSSGA PPPSX_2
GLP-1	HX_1EGT FTSDV SSYLE EQAAK EFIAW LVKGG PSSGA PPPSX_2

8 differential amino acids: 80% homology
Without the C_{ex} tail: 71% homology

Fig. 6

GLP-1/GIP/Gcg	HX_1QGT FTSDK SKYLD ERAAQ DFVQW LLDGG PSSGA PPPSX_2
GLP-1	HX_1EGT FTSDV SSYLE EQAAK EFIAW LVKGG PSSGA PPPSX_2

11 differential amino acids: 72% homology
Without the C_{ex} tail: 62% homology

Fig. 7

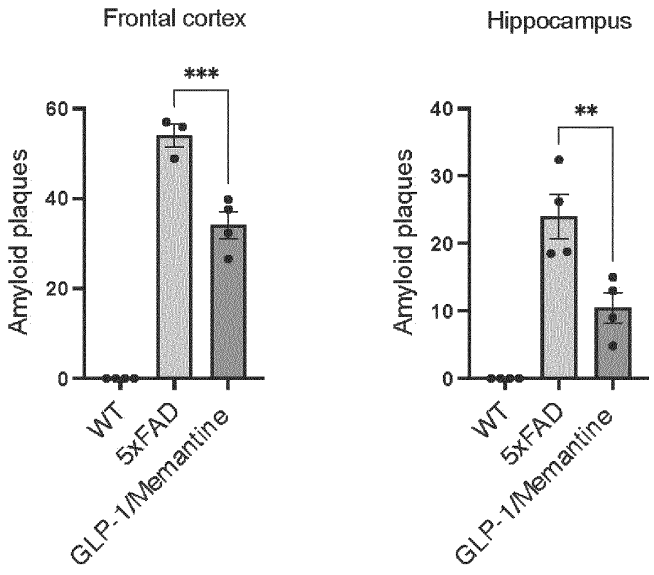

Fig. 8