Figure S1

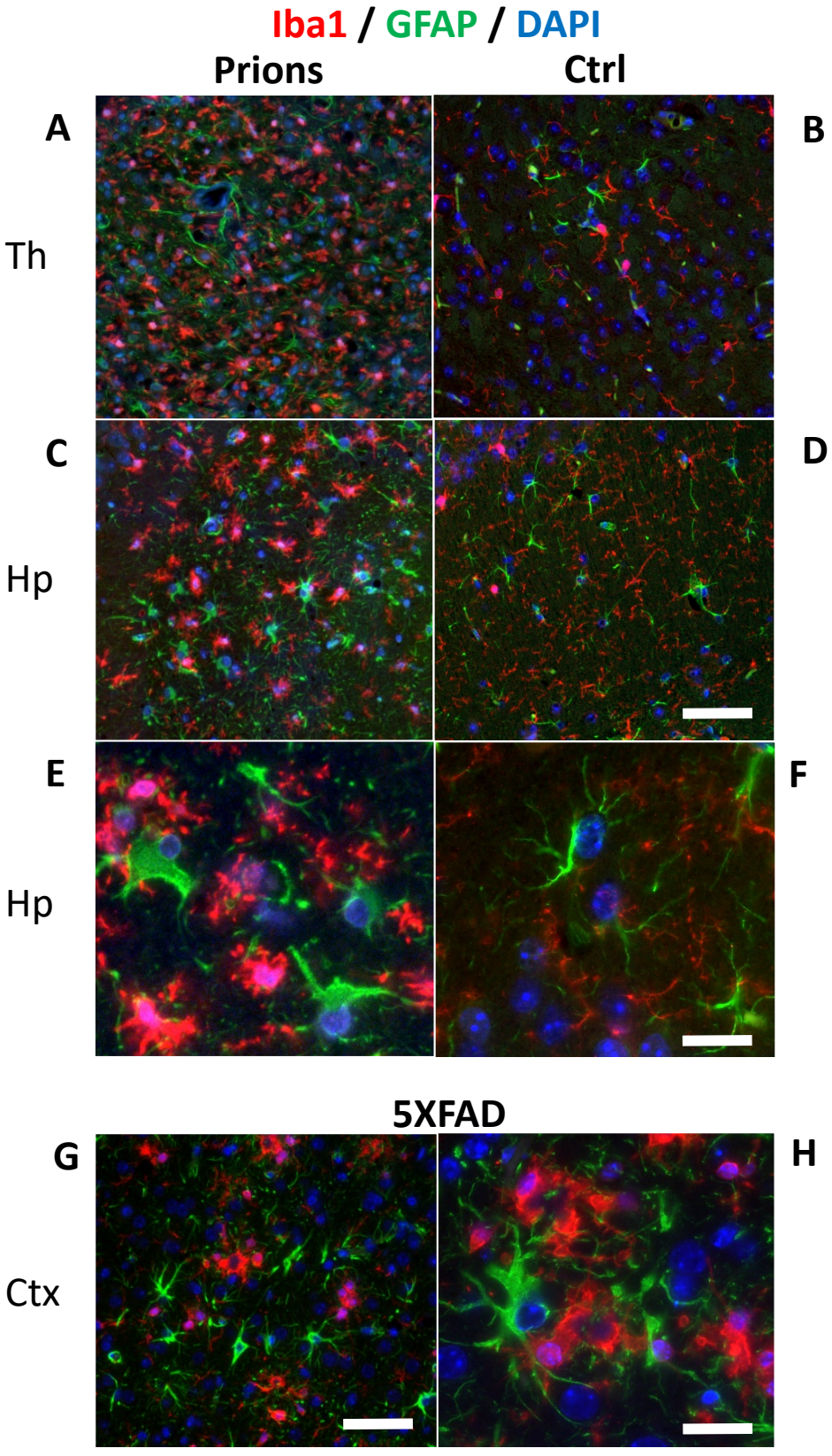


Figure S2

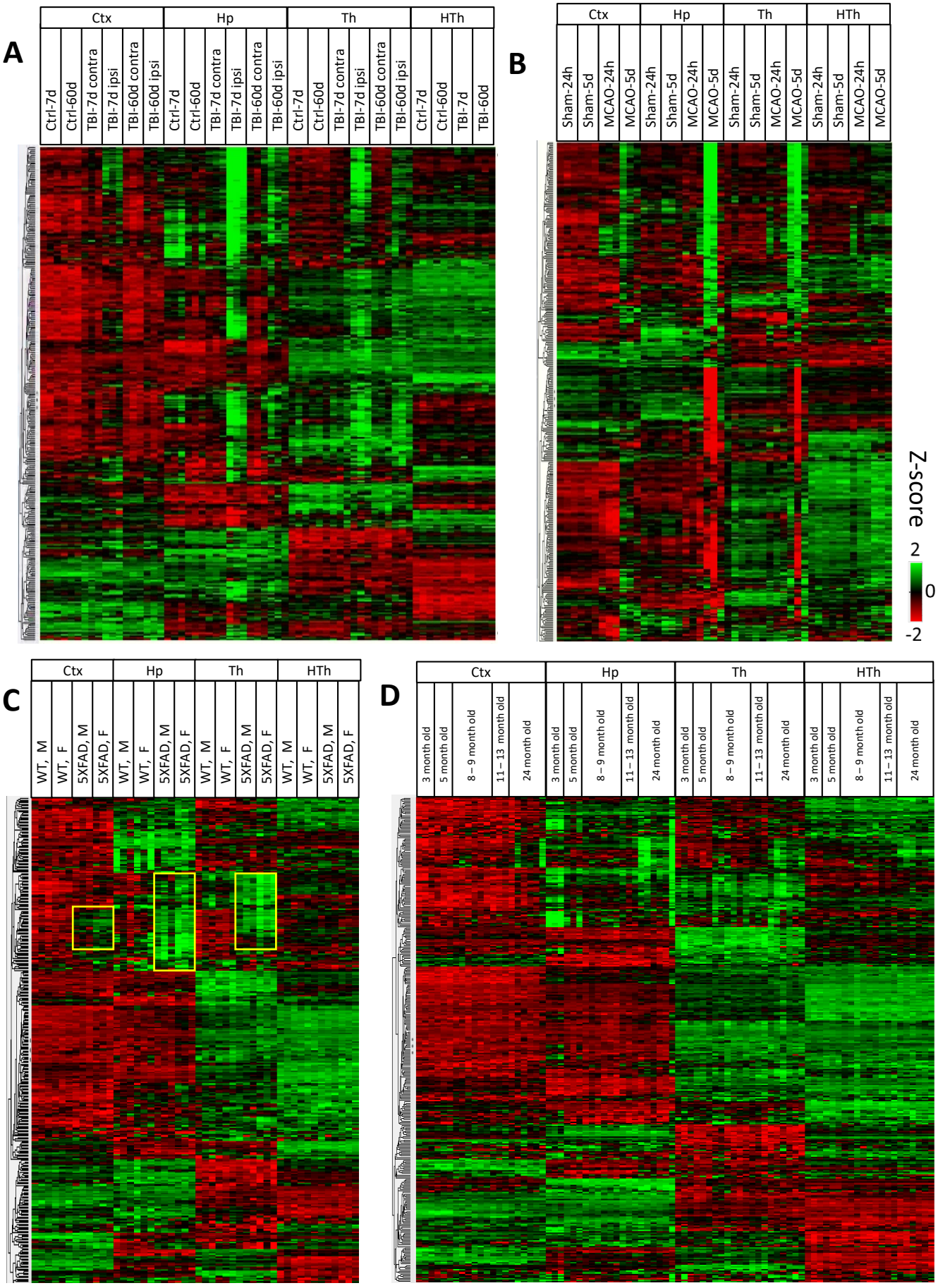

A
Ctx
Hp
Th
HTh
Ctrl-7d
Ctrl-60d
TBI-7d contra
TBI-7d ipsi
TBI-60d contra
TBI-60d ipsi
TBI-7d
TBI-60d
B
Sham-24h
Sham-5d
MCAO-24h
MCAO-5d
Z-score
2
0
-2
C
WT, M
WT, F
5XFAD, M
5XFAD, F
D
3 month old
5 month old
8 – 9 month old
11 – 13 month old
24 month old

Figure S3

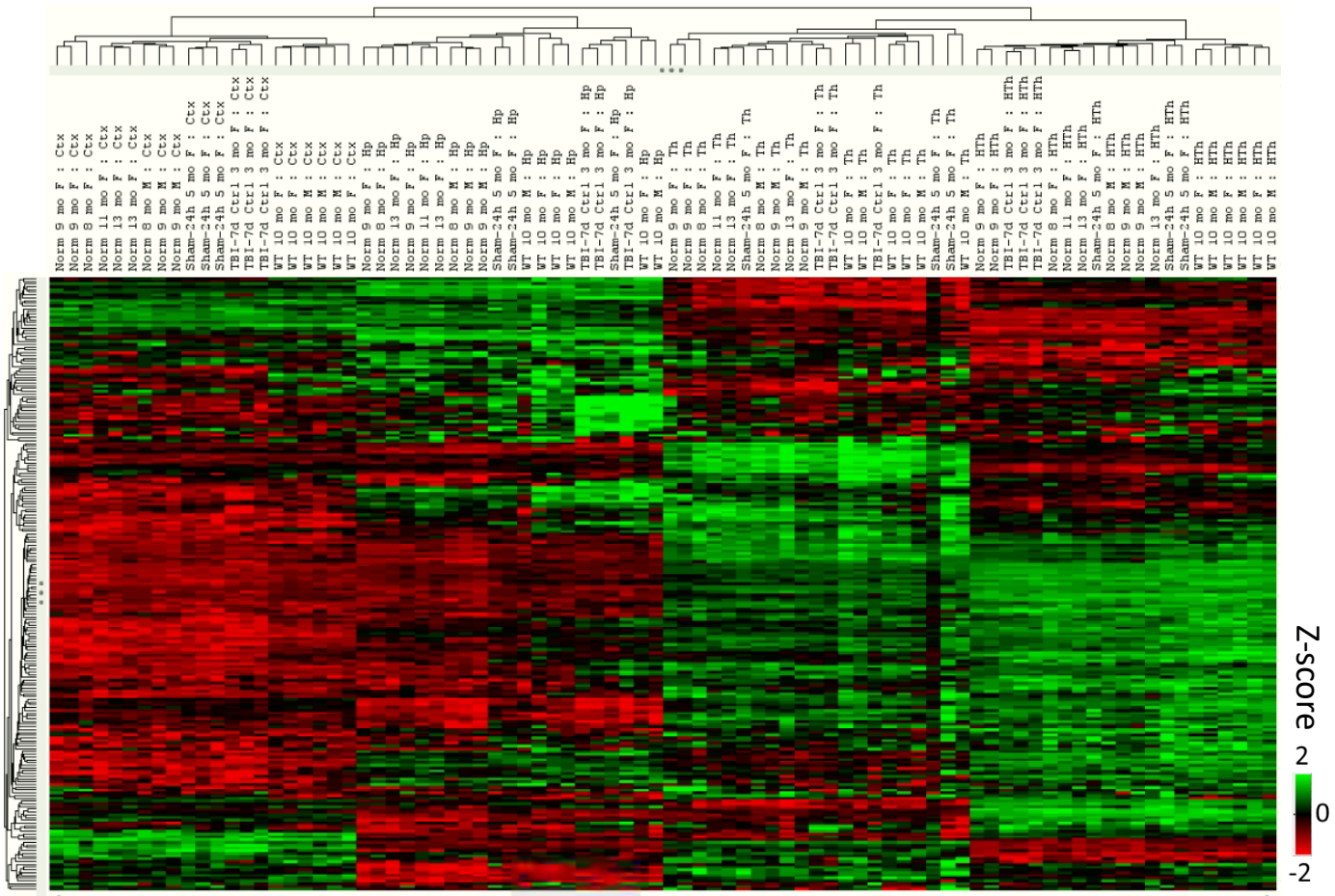

Norm 9 mo F : Ctx
Norm 9 mo F : Ctx
Norm 8 mo F : Ctx
Norm 11 mo F : Ctx
Norm 13 mo F : Ctx
Norm 13 mo F : Ctx
Norm 8 mo M : Ctx
Norm 9 mo M : Ctx
Norm 9 mo M : Ctx
Sham-24h 5 mo F : Ctx
Sham-24h 5 mo F : Ctx
Sham-24h 5 mo F : Ctx
TBI-7d Ctrl 3 mo F : Ctx
TBI-7d Ctrl 3 mo F : Ctx
TBI-7d Ctrl 3 mo F : Ctx
WT 10 mo F : Ctx
WT 10 mo F : Ctx
WT 10 mo M : Ctx
WT 10 mo M : Ctx
WT 10 mo F : Ctx
WT 10 mo F : Hp
Norm 9 mo F : Hp
Norm 8 mo F : Hp
Norm 13 mo F : Hp
Norm 9 mo F : Hp
Norm 11 mo F : Hp
Norm 13 mo F : Hp
Norm 8 mo M : Hp
Norm 9 mo M : Hp
Norm 9 mo M : Hp
Sham-24h 5 mo F : Hp
Sham-24h 5 mo F : Hp
WT 10 mo M : Hp
WT 10 mo F : Hp
WT 10 mo F : Hp
WT 10 mo M : Hp
TBI-7d Ctrl 3 mo F : Hp
TBI-7d Ctrl 3 mo F : Hp
Sham-24h 5 mo F : Hp
TBI-7d Ctrl 3 mo F : Hp
WT 10 mo F : Hp
WT 10 mo M : Hp
Norm 9 mo F : Th
Norm 9 mo F : Th
Norm 8 mo F : Th
Norm 11 mo F : Th
Norm 13 mo F : Th
Sham-24h 5 mo F : Th
Norm 8 mo M : Th
Norm 9 mo M : Th
Norm 13 mo F : Th
Norm 9 mo M : Th
TBI-7d Ctrl 3 mo F : Th
TBI-7d Ctrl 3 mo F : Th
WT 10 mo F : Th
WT 10 mo M : Th
TBI-7d Ctrl 3 mo F : Th
WT 10 mo F : Th
WT 10 mo M : Th
Sham-24h 5 mo F : Th
Sham-24h 5 mo F : Th
WT 10 mo M : Th
Norm 9 mo F : HTh
Norm 9 mo F : HTh
TBI-7d Ctrl 3 mo F : HTh
TBI-7d Ctrl 3 mo F : HTh
TBI-7d Ctrl 3 mo F : HTh
Norm 8 mo F : HTh
Norm 11 mo F : HTh
Norm 13 mo F : HTh
Sham-24h 5 mo F : HTh
Norm 8 mo M : HTh
Norm 9 mo M : HTh
Norm 13 mo F : HTh
Sham-24h 5 mo F : HTh
Sham-24h 5 mo F : HTh
WT 10 mo F : HTh
WT 10 mo M : HTh
WT 10 mo F : HTh
WT 10 mo M : HTh
WT 10 mo F : HTh
WT 10 mo M : HTh
Z-score
2
0
-2

Figure S4

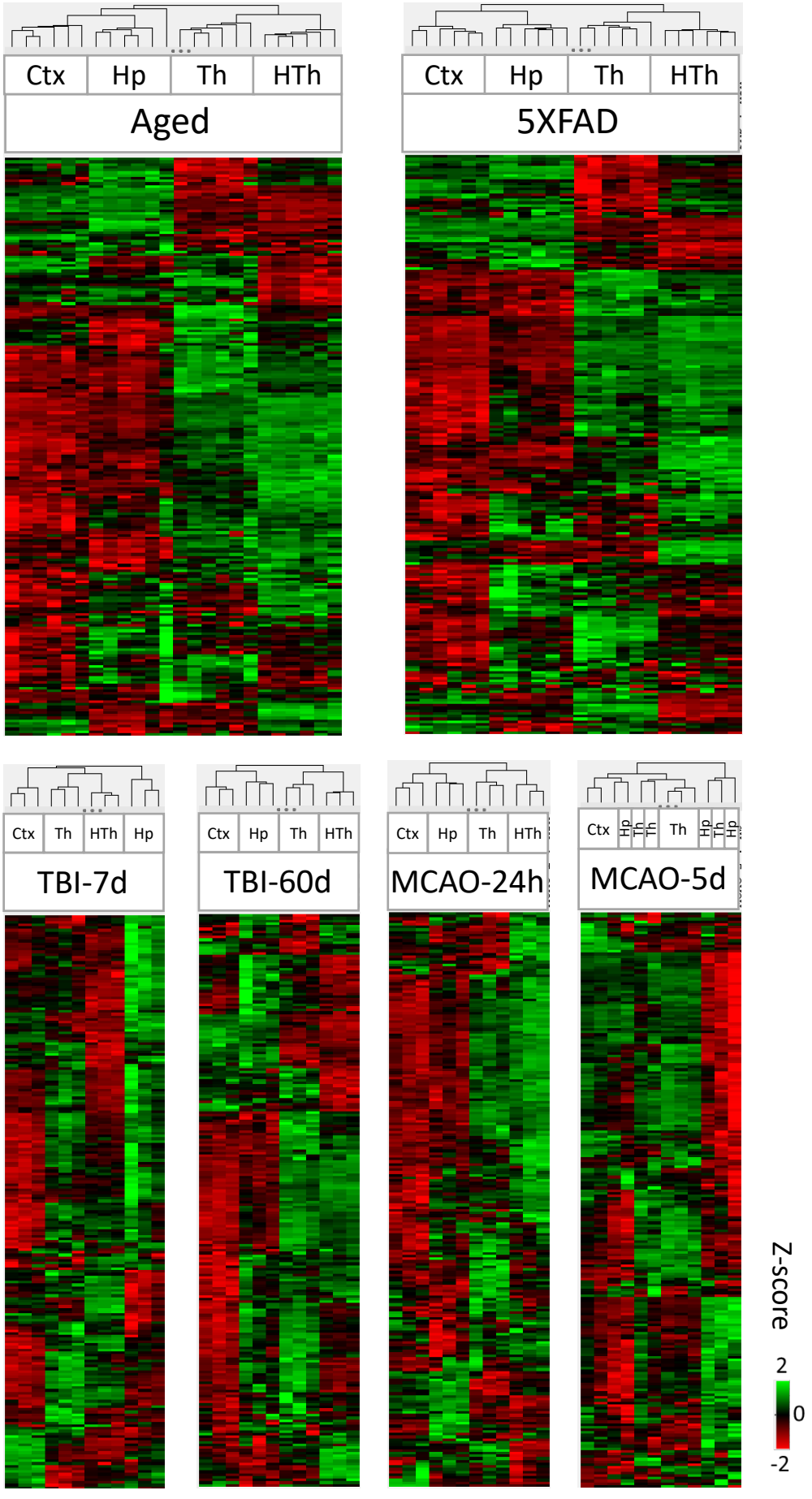

Ctx
Hp
Th
HTh
Aged
Ctx
Hp
Th
HTh
5XFAD
Ctx
Th
HTh
Hp
TBI-7d
Ctx
Hp
Th
HTh
TBI-60d
Ctx
Hp
Th
HTh
MCAO-24h
Ctx
Hp
Th
HTh
MCAO-5d
Z-score
2
0
-2

Figure S5

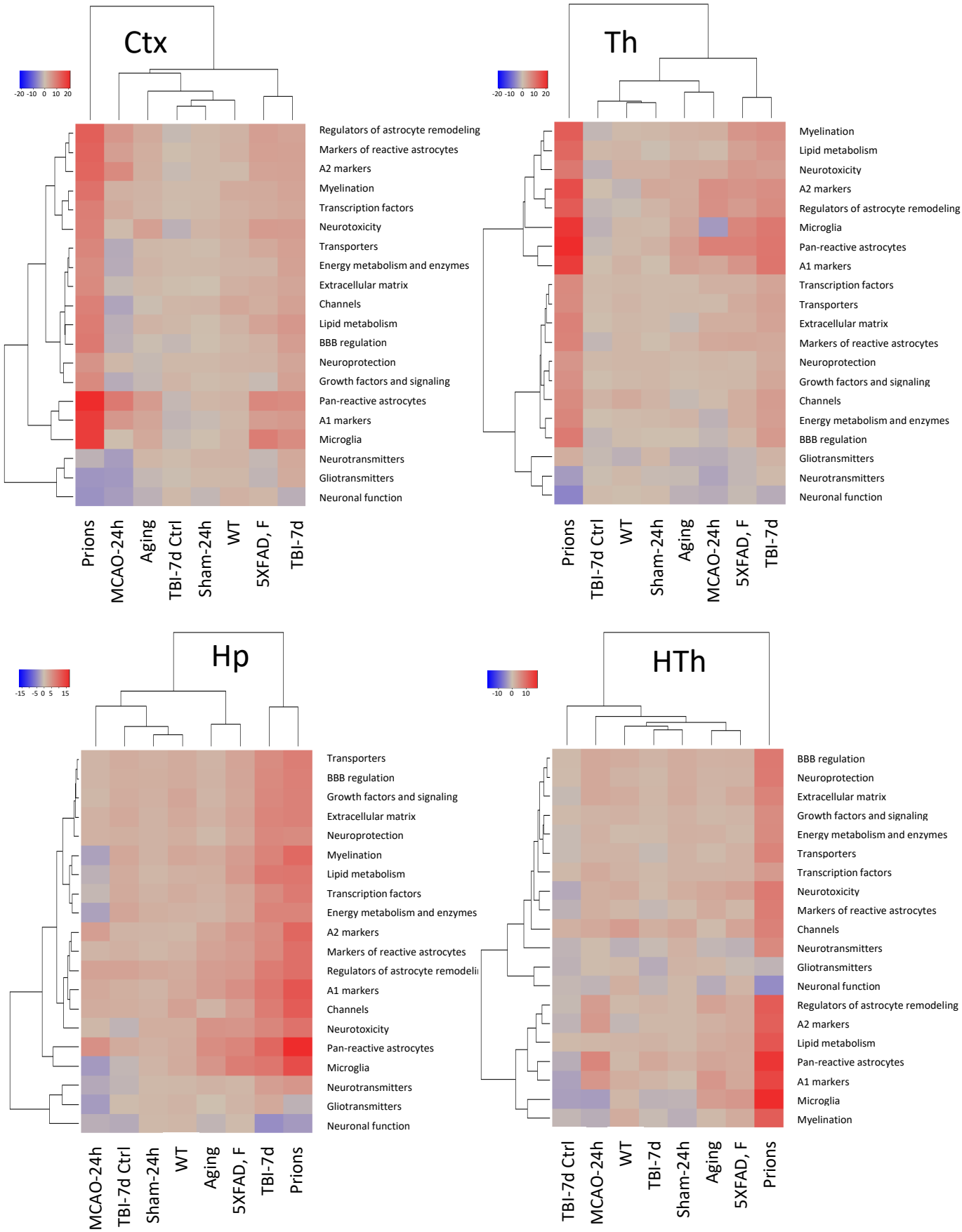
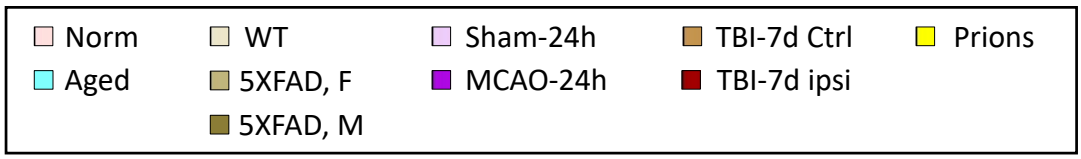
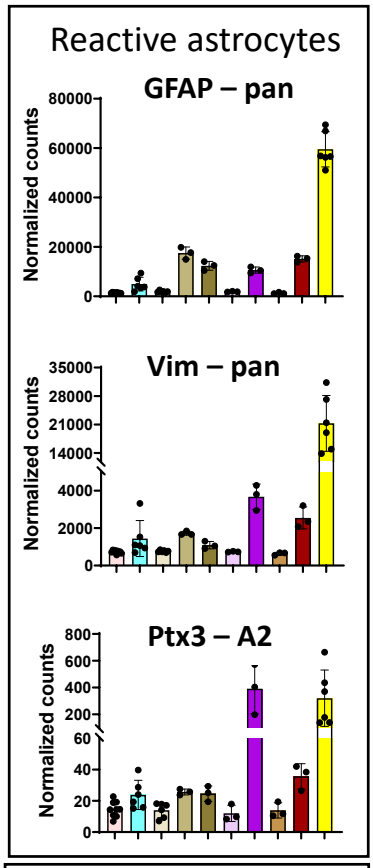
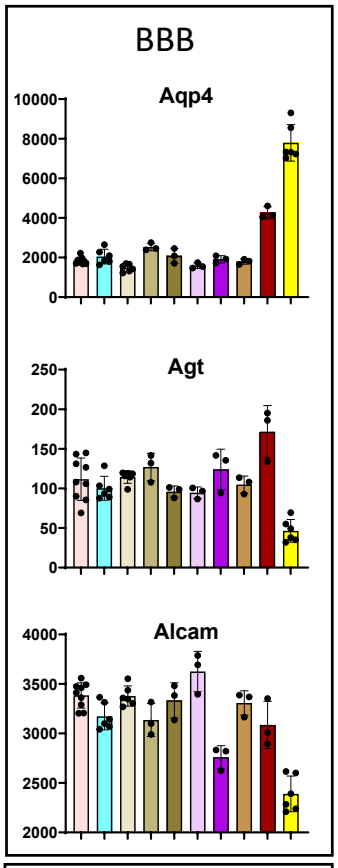
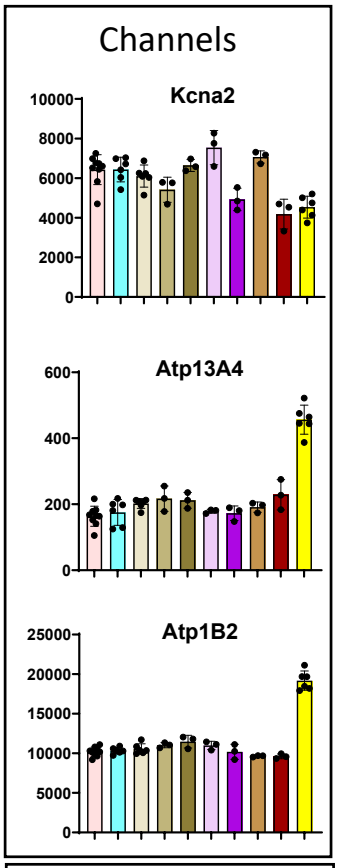

Ctx
-20 -10 0 10 20
Regulators of astrocyte remodeling
Markers of reactive astrocytes
A2 markers
Myelination
Transcription factors
Neurotoxicity
Transporters
Energy metabolism and enzymes
Extracellular matrix
Channels
Lipid metabolism
BBB regulation
Neuroprotection
Growth factors and signaling
Pan-reactive astrocytes
A1 markers
Microglia
Neurotransmitters
Gliotransmitters
Neuronal function
Prions
MCAO-24h
Aging
TBI-7d Ctrl
Sham-24h
WT
5XFAD, F
TBI-7d
Th
-20 -10 0 10 20
Myelination
Lipid metabolism
Neurotoxicity
A2 markers
Regulators of astrocyte remodeling
Microglia
Pan-reactive astrocytes
A1 markers
Transcription factors
Transporters
Extracellular matrix
Markers of reactive astrocytes
Neuroprotection
Growth factors and signaling
Channels
Energy metabolism and enzymes
BBB regulation
Gliotransmitters
Neurotransmitters
Neuronal function
Prions
TBI-7d Ctrl
WT
Sham-24h
Aging
MCAO-24h
5XFAD, F
TBI-7d
Hp
-15 -5 0 5 15
Transporters
BBB regulation
Growth factors and signaling
Extracellular matrix
Neuroprotection
Myelination
Lipid metabolism
Transcription factors
Energy metabolism and enzymes
A2 markers
Markers of reactive astrocytes
Regulators of astrocyte remodeli
A1 markers
Channels
Neurotoxicity
Pan-reactive astrocytes
Microglia
Neurotransmitters
Gliotransmitters
Neuronal function
MCAO-24h
TBI-7d Ctrl
Sham-24h
WT
Aging
5XFAD, F
TBI-7d
Prions
HTh
-10 0 10
BBB regulation
Neuroprotection
Extracellular matrix
Growth factors and signaling
Energy metabolism and enzymes
Transporters
Transcription factors
Neurotoxicity
Markers of reactive astrocytes
Channels
Neurotransmitters
Gliotransmitters
Neuronal function
Regulators of astrocyte remodeling
A2 markers
Lipid metabolism
Pan-reactive astrocytes
A1 markers
Microglia
Myelination
TBI-7d Ctrl
MCAO-24h
WT
TBI-7d
Sham-24h
Aging
5XFAD, F
Prions

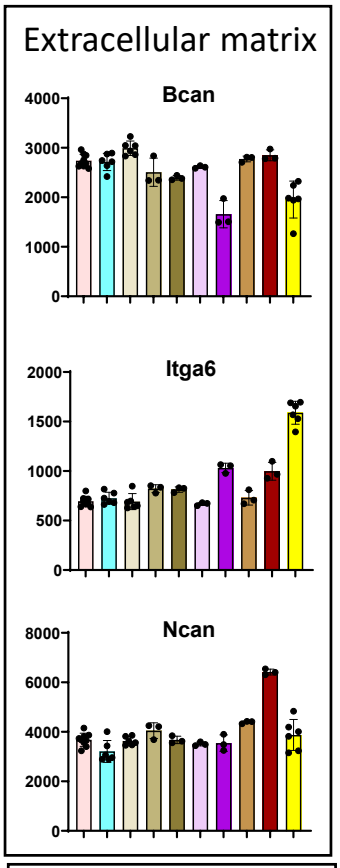
Figure S6

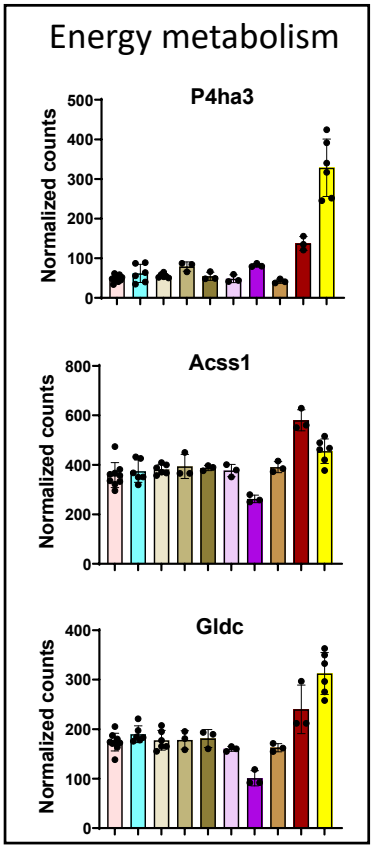

Norm
Aged
WT
5XFAD, F
5XFAD, M
Sham-24h
MCAO-24h
TBI-7d Ctrl
TBI-7d ipsi
Prions

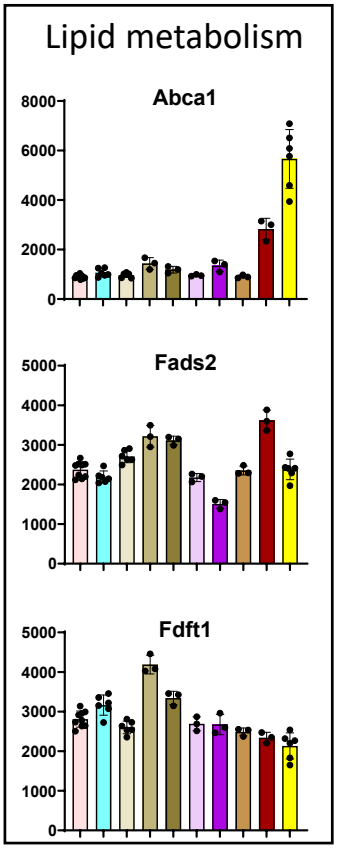

Reactive astrocytes
GFAP – pan
Vim – pan
Ptx3 – A2
Normalized counts

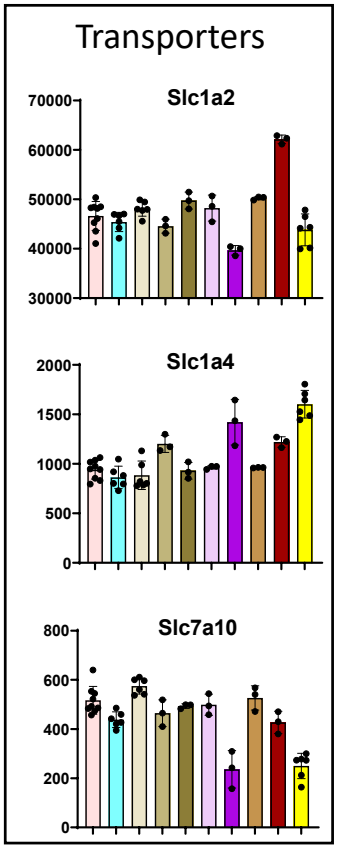

BBB
Aqp4
Agt
Alcam

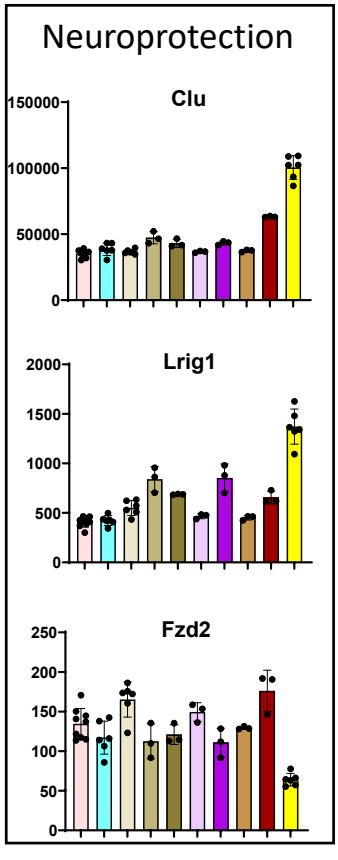

Channels
Kcna2
Atp13A4
Atp1B2


Extracellular matrix
Bcan
Itga6
Ncan


Energy metabolism
P4ha3
Acss1
Gldc
Normalized counts


Lipid metabolism
Abca1
Fads2
Fdft1


Transporters
Slc1a2
Slc1a4
Slc7a10


Neuroprotection
Clu
Lrig1
Fzd2