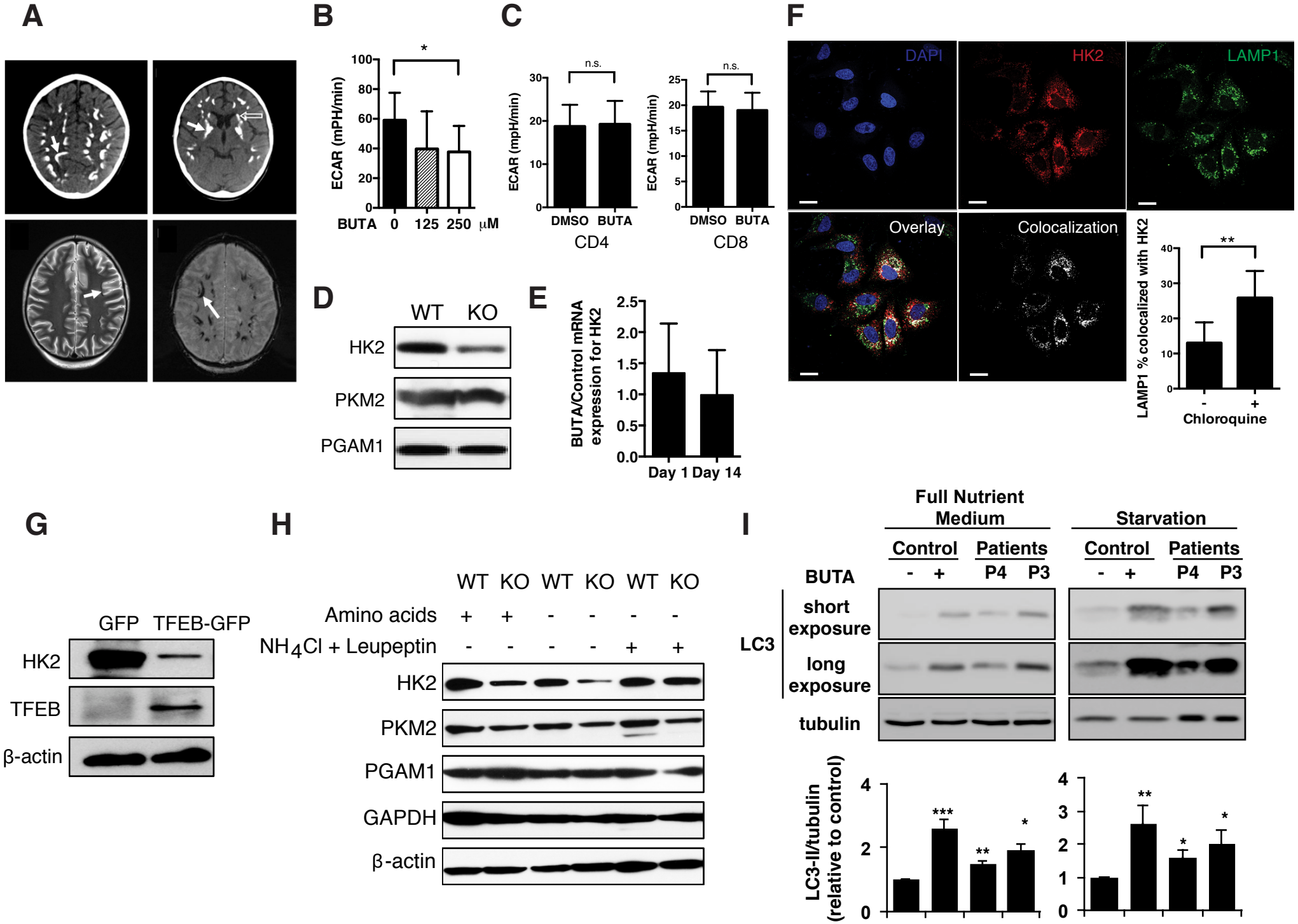
A
B
ECAR (mPH/min)
BUTA 0 125 250 μM
C
ECAR (mpH/min)
DMSO BUTA
CD4
CD8
n.s.
D
WT KO
HK2
PKM2
PGAM1
E
BUTA/Control mRNA expression for HK2
Day 1 Day 14
F
DAPI
HK2
LAMP1
Overlay
Colocalization
LAMP1 % colocalized with HK2
Chloroquine
G
GFP TFEB-GFP
HK2
TFEB
β-actin
H
WT KO WT KO WT KO
Amino acids
NH4Cl + Leupeptin
HK2
PKM2
PGAM1
GAPDH
β-actin
I
Full Nutrient Medium
Starvation
Control
Patients
BUTA
P4 P3
LC3
short exposure
long exposure
tubulin
LC3-II/tubulin (relative to control)