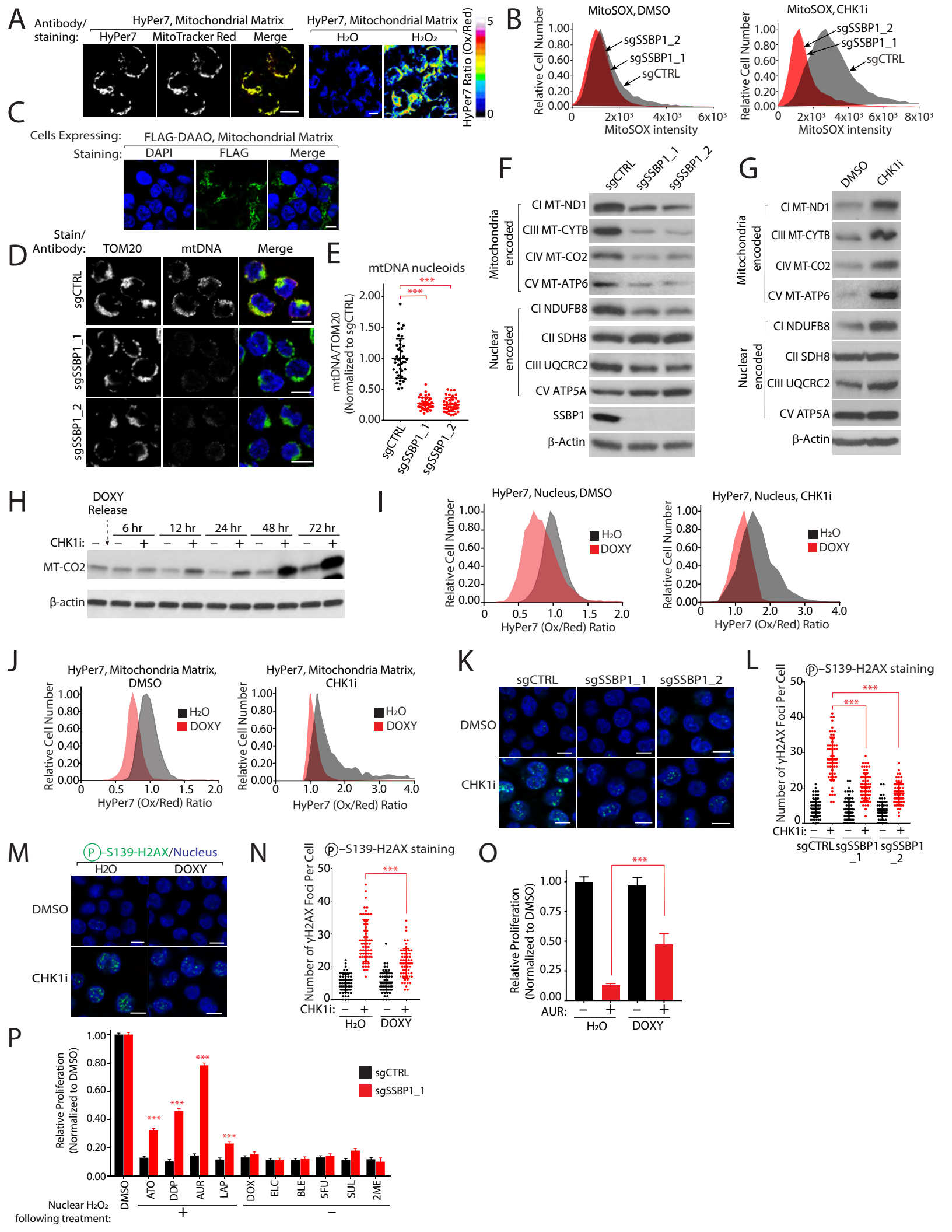
A
Antibody/ staining:
HyPer7, Mitochondrial Matrix
HyPer7
MitoTracker Red
Merge
HyPer7, Mitochondrial Matrix
H2O
H2O2
HyPer7 Ratio (Ox/Red)
5
0
B
MitoSOX, DMSO
MitoSOX, CHK1i
Relative Cell Number
sgSSBP1_2
sgSSBP1_1
sgCTRL
MitoSOX intensity
C
Cells Expressing:
FLAG-DAAO, Mitochondrial Matrix
Staining:
DAPI
FLAG
Merge
D
Stain/ Antibody:
TOM20
mtDNA
Merge
sgCTRL
sgSSBP1_1
sgSSBP1_2
E
mtDNA nucleoids
mtDNA/TOM20 (Normalized to sgCTRL)
F
sgCTRL
sgSSBP1_1
sgSSBP1_2
Mitochondria encoded
CI MT-ND1
CIII MT-CYTB
CIV MT-CO2
CV MT-ATP6
Nuclear encoded
CI NDUFB8
CII SDH8
CIII UQCRC2
CV ATP5A
SSBP1
β-Actin
G
DMSO
CHK1i
H
DOXY
Release
6 hr
12 hr
24 hr
48 hr
72 hr
CHK1i:
MT-CO2
β-actin
I
HyPer7, Nucleus, DMSO
HyPer7, Nucleus, CHK1i
H2O
DOXY
HyPer7 (Ox/Red) Ratio
J
HyPer7, Mitochondria Matrix, DMSO
HyPer7, Mitochondria Matrix, CHK1i
K
sgCTRL
sgSSBP1_1
sgSSBP1_2
DMSO
CHK1i
L
Ⓟ–S139-H2AX staining
Number of γH2AX Foci Per Cell
CHK1i:
sgCTRL
sgSSBP1_1
sgSSBP1_2
M
Ⓟ–S139-H2AX/Nucleus
H2O
DOXY
DMSO
CHK1i
N
Ⓟ–S139-H2AX staining
Number of γH2AX Foci Per Cell
CHK1i:
H2O
DOXY
O
Relative Proliferation (Normalized to DMSO)
AUR:
H2O
DOXY
P
Relative Proliferation (Normalized to DMSO)
sgCTRL
sgSSBP1_1
DMSO
ATO
DDP
AUR
LAP
DOX
ELC
BLE
5FU
SUL
2ME
Nuclear H2O2 following treatment:
+
–