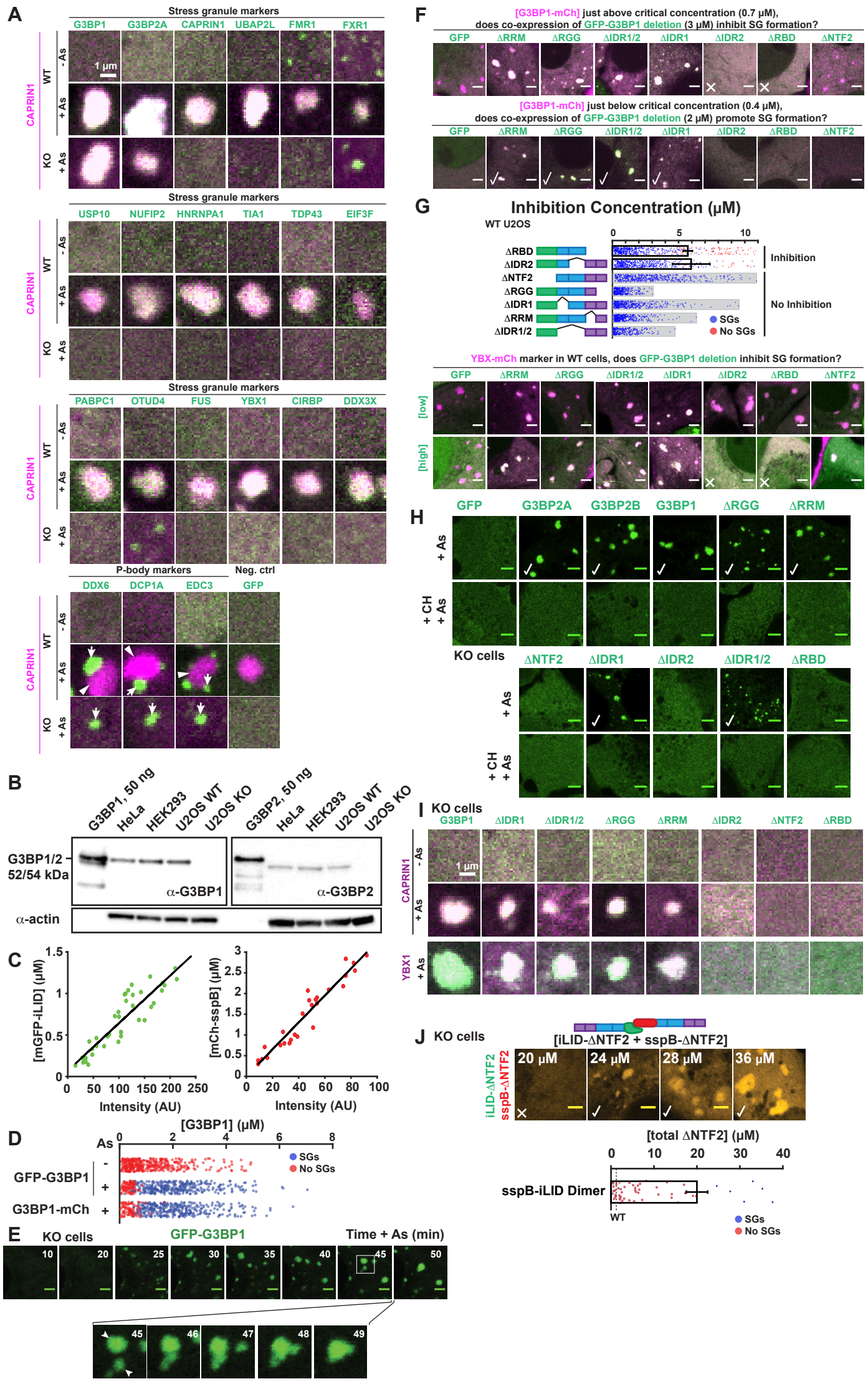
A
Stress granule markers
G3BP1
G3BP2A
CAPRIN1
UBAP2L
FMR1
FXR1
CAPRIN1
WT
- As
+ As
KO
+ As
1 µm
Stress granule markers
USP10
NUFIP2
HNRNPA1
TIA1
TDP43
EIF3F
Stress granule markers
PABPC1
OTUD4
FUS
YBX1
CIRBP
DDX3X
P-body markers
Neg. ctrl
DDX6
DCP1A
EDC3
GFP
B
G3BP1, 50 ng
HeLa
HEK293
U2OS WT
U2OS KO
G3BP2, 50 ng
G3BP1/2
52/54 kDa
α-G3BP1
α-G3BP2
α-actin
C
[mGFP-iLID] (µM)
Intensity (AU)
[mCh-sspB] (µM)
Intensity (AU)
D
[G3BP1] (µM)
As
GFP-G3BP1
G3BP1-mCh
SGs
No SGs
E
KO cells
GFP-G3BP1
Time + As (min)
F
[G3BP1-mCh] just above critical concentration (0.7 µM),
does co-expression of GFP-G3BP1 deletion (3 µM) inhibit SG formation?
GFP
ΔRRM
ΔRGG
ΔIDR1/2
ΔIDR1
ΔIDR2
ΔRBD
ΔNTF2
[G3BP1-mCh] just below critical concentration (0.4 µM),
does co-expression of GFP-G3BP1 deletion (2 µM) promote SG formation?
G
Inhibition Concentration (µM)
WT U2OS
ΔRBD
ΔIDR2
ΔNTF2
ΔRGG
ΔIDR1
ΔRRM
ΔIDR1/2
Inhibition
No Inhibition
SGs
No SGs
YBX-mCh marker in WT cells, does GFP-G3BP1 deletion inhibit SG formation?
[low]
[high]
H
GFP
G3BP2A
G3BP2B
G3BP1
ΔRGG
ΔRRM
+ As
+ CH
+ As
KO cells
ΔNTF2
ΔIDR1
ΔIDR2
ΔIDR1/2
ΔRBD
I
KO cells
G3BP1
ΔIDR1
ΔIDR1/2
ΔRGG
ΔRRM
ΔIDR2
ΔNTF2
ΔRBD
CAPRIN1
- As
+ As
1 µm
YBX1
+ As
J
KO cells
[iLID-ΔNTF2 + sspB-ΔNTF2]
iLID-ΔNTF2
sspB-ΔNTF2
20 µM
24 µM
28 µM
36 µM
[total ΔNTF2] (µM)
sspB-iLID Dimer
WT
SGs
No SGs