Fig. S5

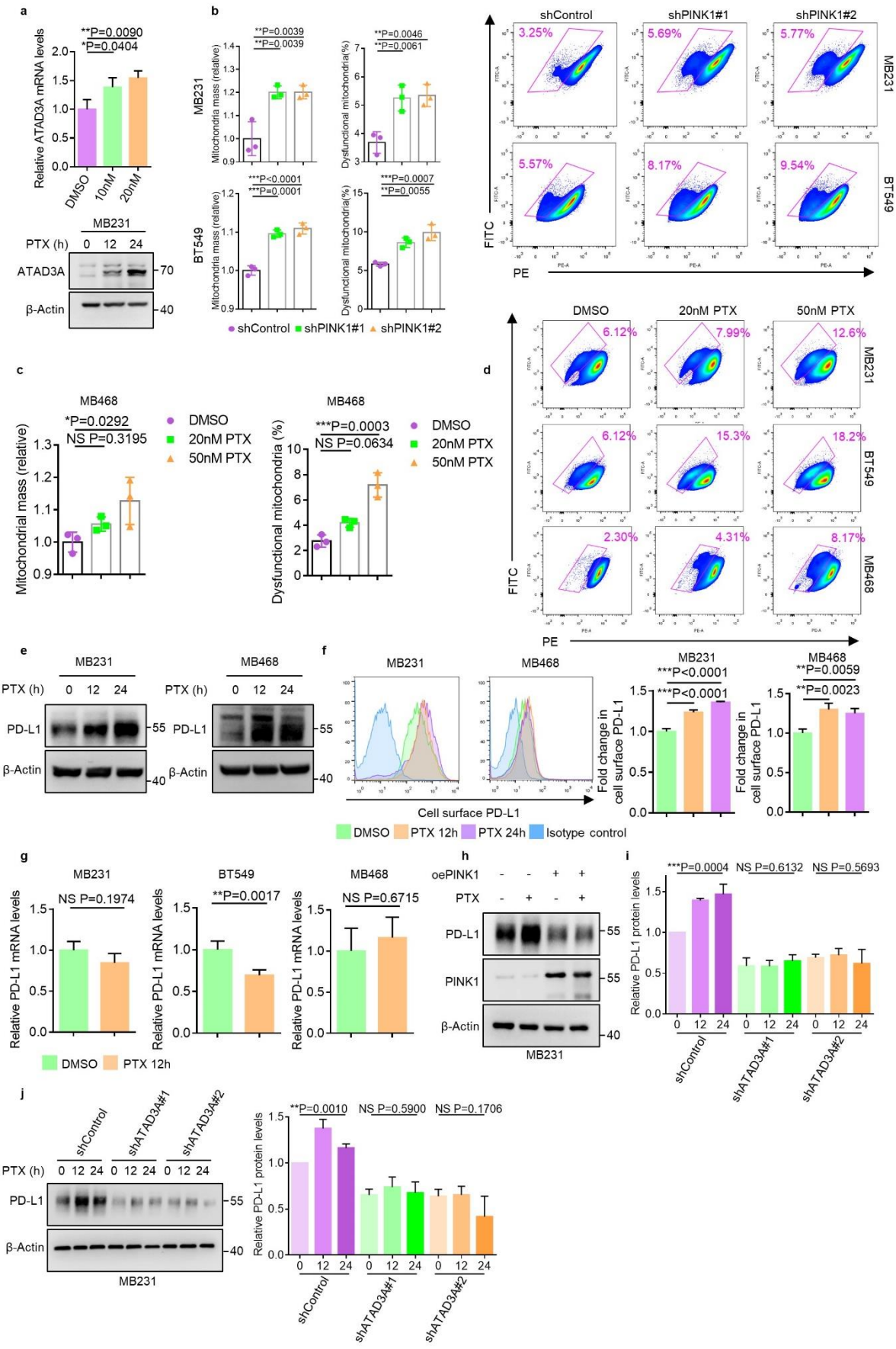
a
**P=0.0090
*P=0.0404
Relative ATAD3A mRNA levels
DMSO
10nM
20nM
MB231
PTX (h) 0 12 24
ATAD3A
β-Actin
70
40
b
MB231
**P=0.0039
**P=0.0039
Mitochondria mass (relative)
**P=0.0046
**P=0.0061
Dysfunctional mitochondria(%)
BT549
***P<0.0001
***P=0.0001
***P=0.0007
**P=0.0055
shControl
shPINK1#1
shPINK1#2
c
MB468
*P=0.0292
NS P=0.3195
Mitochondrial mass (relative)
DMSO
20nM PTX
50nM PTX
MB468
***P=0.0003
NS P=0.0634
Dysfunctional mitochondria (%)
d
shControl
shPINK1#1
shPINK1#2
3.25%
5.69%
5.77%
5.57%
8.17%
9.54%
MB231
BT549
FITC
PE
DMSO
20nM PTX
50nM PTX
6.12%
7.99%
12.6%
6.12%
15.3%
18.2%
2.30%
4.31%
8.17%
MB231
BT549
MB468
e
MB231
MB468
PTX (h) 0 12 24
PD-L1
β-Actin
55
40
f
MB231
MB468
Cell surface PD-L1
DMSO
PTX 12h
PTX 24h
Isotype control
Fold change in cell surface PD-L1
***P<0.0001
***P<0.0001
**P=0.0059
**P=0.0023
g
MB231
NS P=0.1974
BT549
**P=0.0017
MB468
NS P=0.6715
Relative PD-L1 mRNA levels
DMSO
PTX 12h
h
oePINK1
PTX
PD-L1
PINK1
β-Actin
55
55
40
MB231
i
***P=0.0004
NS P=0.6132
NS P=0.5693
Relative PD-L1 protein levels
shControl
shATAD3A#1
shATAD3A#2
j
shControl
shATAD3A#1
shATAD3A#2
PTX (h) 0 12 24 0 12 24 0 12 24
PD-L1
β-Actin
55
40
MB231
**P=0.0010
NS P=0.5900
NS P=0.1706
Relative PD-L1 protein levels
shControl
shATAD3A#1
shATAD3A#2

Fig. S5 Paclitaxel increases PD-L1 accumulation by suppressing mitophagy.

a Top, qRT-PCR of ATAD3A mRNA in MDA-MB-231 cells in the presence of paclitaxel (10 nM or 20 nM) for 12 h (*n* = 3, one-way ANOVA). Bottom, immunoblot of ATAD3A in MDA-MB-231 cells incubated with 20 nM paclitaxel for 12 h and 24 h. **b** Left, quantification of mitochondrial mass and the percentage of dysfunctional mitochondria in control and PINK1-knockdown cells (*n* = 3, one-way ANOVA). Right, flow cytometry of mitochondrial mass (vertical axis, assessed with the green fluorescent mitochondrial stain MitoTracker Green FM) and mitochondrial membrane potential (horizontal axis, assessed with the red fluorescent dye MitoTracker Red CMXRos sequestered by active mitochondria). Outlined area, dysfunctional mitochondria. **c** Quantification of mitochondrial mass and the percentage of dysfunctional mitochondria in MDA-MB-468 cells in the presence of paclitaxel (20 nM or 50 nM) for 16 h (*n* = 3, one-way ANOVA). **d** Flow cytometry of mitochondrial mass and mitochondrial membrane potential. Outlined area, dysfunctional mitochondria. **e** Immunoblot of PD-L1 in MDA-MB-231 cells and MDA-MB-468 cells with 20 nM paclitaxel treatment for indicated times. h, hours. **f** Flow cytometry (left) and quantification (right) of surface PD-L1 in human TNBC cells treated with 20 nM paclitaxel for indicated times. h, hours (*n* = 3, one-way ANOVA). **g** qRT-PCR of PD-L1 mRNA in human TNBC cells treated with 20 nM paclitaxel for 12 h (*n* = 3, *t*-test). **h** Immunoblot of PD-L1 in control and PINK1-overexpressing MDA-MB-231 cells treated with or without 20 nM paclitaxel for 24 h. **i** Quantification of relative PD-L1 protein level in immunoblot, related to Fig. 4k. **j** Left, immunoblot of PD-L1

in control and ATAD3A-knockdown MDA-MB-231 cells treated with or without 20 nM paclitaxel for indicated times. h, hours. Right, quantification of relative PD-L1 protein level in immunoblot. Data are representative of at least three independent experiments and are shown as means ± SD.