| Vendor                      | Cat. # | Antibody name                                |
|-----------------------------|--------|----------------------------------------------|
| Cell Signaling Technology   | 94296  | Mcl1                                         |
| Cell Signaling Technology   | 4223   | Bcl2                                         |
| Cell Signaling Technology   | 2827   | p-S70 Bcl2                                   |
| Cell Signaling Technology   | 966    | cleaved caspase 3                            |
| Cell Signaling Technology   | 14093  | A1                                           |
| Cell Signaling Technology   | 2724   | Bcl-w                                        |
| Cell Signaling Technology   | 2764   | Bcl-xL                                       |
| Cell Signaling Technology   | 12105  | Bak                                          |
| Cell Signaling Technology   | 2002   | Bid                                          |
| Cell Signaling Technology   | 2933   | Bim                                          |
| Cell Signaling Technology   | 5023   | Bax                                          |
| Cell Signaling Technology   | 9239   | Bad                                          |
| Cell Signaling Technology   | 12450  | PUMA                                         |
| Cell Signaling Technology   | 4904   | STAT3                                        |
| Cell Signaling Technology   | 9134   | p-STAT3                                      |
| Cell Signaling Technology   | 9542   | PARP Antibody                                |
| Cell Signaling Technology   | 5625   | Cleaved PARP (Asp214) (D64E10) XP Rabbit mAb|
| Cell Signaling Technology   | 9281   | Phospho-p53 (Ser392) Antibody                |
| Cell Signaling Technology   | 9275   | Phospho-Akt (Thr308) Antibody                |
| Cell Signaling Technology   | 4370   | phospho-p44/42 MAPK(Erk1/2) XP Rabbit mAb    |
| Cell Signaling Technology   | 4911   | Phospho-YAP(Ser127) antibody                 |
| Cell Signaling Technology   | 14074  | YAP (D8H1X) XP® Rabbit mAb                   |
| Cell Signaling Technology   | 3398   | Phospho-eIF2α (Ser51) (D9G8) XP Rabbit mAb   |
| Cell Signaling Technology   | 5324   | eIF2α (D7D3) XP® Rabbit mAb                  |
| Cell Signaling Technology   | 5558   | Phospho-GSK-3β (Ser9) (D85E12) XP Rabbit mAb|
| Cell Signaling Technology   | 4176   | Phospho-β-Catenin(Ser675)(D2F1) XP Rabbit mAb|
| Cell Signaling Technology   | 9520   | phospho-Smad3(Ser423/425)(C25A9) Rabbit mAb  |
| Cell Signaling Technology   | 8242   | NF-κB p65 (D14E12) XP® Rabbit mAb            |
| Cell Signaling Technology   | 3033   | Phospho-NF-κB p65 (Ser536) (93H1) Rabbit mAb |
| Cell Signaling Technology   | 2697   | Phospho-IKKα/β (Ser176/180) (16A6) Rabbit mAb|
| Cell Signaling Technology   | 4691   | Akt (pan) (C67E7) Rabbit mAb                 |
| Cell Signaling Technology   | 4695   | ERK1/2                                       |
| Cell Signaling Technology   | 8943   | IKKβ (D30C6) Rabbit mAb                      |
| Santa Cruz Biotechnology    | sc-126 | pS3(Do-1)                                    |
| Santa Cruz biotechnology    | sc-7985-R | p-Akt1/2/3 (Ser473)-R                        |
| Santa Cruz Biotechnology    | sc-8416 | p-p70 S6 kinase α (A-6)                      |
| Santa Cruz Biotechnology    | sc-7199 | β-catenin (H-102 )                           |
| Santa Cruz biotechnology    | sc-231  | RSK-1(C-21)                                  |
| Santa Cruz Biotechnology    | sc-8418 | p70 S6 kinase α (H-9)                        |
| BD Bioscience               | 610201 | GSK3β                                        |
| Millipore                   | 4418   | p-S380 RSK                                   |
**Figure S1** Deletion of PKR promotes cell survival in response to taxol treatment.

(A, B) Two thousand cells (parental, PKR-KO, or PKR-OE) were seeded into 6-well plates and incubated overnight. The cells were then treated for 24 h with the indicated concentrations of taxol. Representative images from three biological repeats were shown. KO: knockout; OE: overexpression.
Figure S2 PKR regulates RSK activity and p53 expression

(A) SKOV3 parental and SKOV3-PKR-KO cells were treated with taxol (100 nM) for 24 h and cell lysates were incubated with Human Phospho-Kinase Array and analyzed with companying software. 

(B) Alterations of phospho-kinases in response to taxol upon PKR deletion. The data were generated by an online software accompanying the Kit (R&D Systems).

(C, D) PKR deletion blocked p53 expression induced by taxol in TOV21G and MCF-7 cells. Cells were treated with taxol (100 nM) for 24 h and total cell lysates were probed with the indicated antibodies.

(E, F) Western blot analysis of major signaling pathways in parental and PKR-KO cells. Signaling or pathways are Akt-S6K, RSK-ERK, YAP, Jak-STAT, Wnt-β-catenin, TGF-SMAD, and NF-kB. The main substrate of PKR eIF2α is also included.