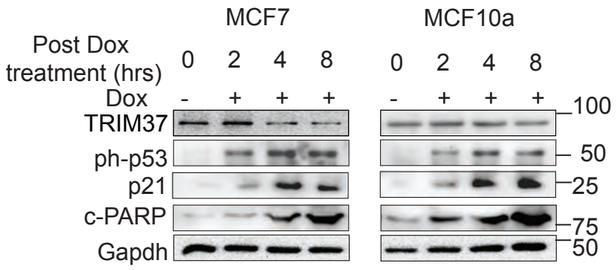
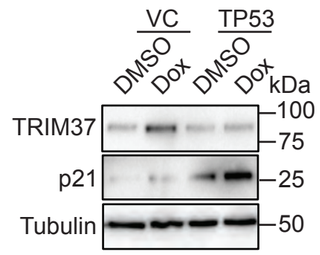
Supplementary Figure 4

A



B



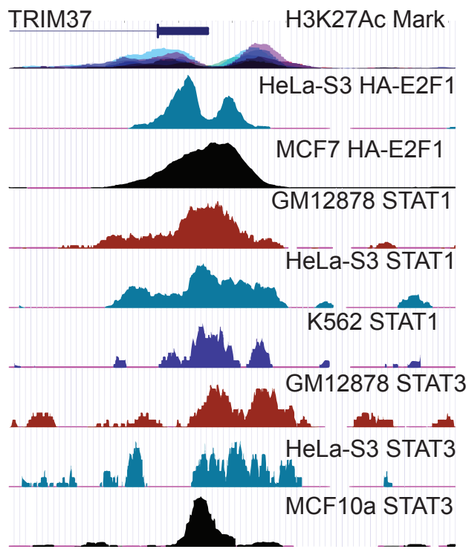
C

TRANSFAC motif	Position of motif relative to TRIM37 TSS	Strand
E2F_Q4_01, E2F_Q6_01	-406	-
E2F_Q2, E2F_Q3_01, E2F_02, E2F_03, E2FDP1RB_01, E2F1_Q4_01	-393	+
E2F1DP1_01	-242	-
E2F_Q2	-150	-
E2F_Q2	-60	-
E2F_Q2	-27	+
E2F_Q2	+49	-
E2F_Q2	+52	+
E2F_Q2	+87	+
E2F_Q2	+109	+
E2F_Q2	+143	-
E2F_Q2	+148	+
E2F_Q2	+192	-
E2F_Q2	+197	+

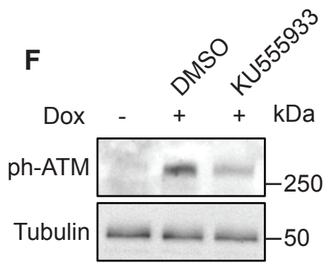
D

TRANSFAC motif	Position of motif relative to *TRIM37* TSS	Strand
STAT6_01, STAT4_01	-1204	+
STAT5A_04	-1371	+
STAT5A_04	-1099	+
STAT5A_04	-1004	+
STAT5A_03, STAT1_03	-934	-
STAT5A_03, STAT1_03	-849	-
STAT5A_04	-840	-
STAT5A_03	-819	-
STAT3_02	-740	-
STAT6_01, STAT4_01, STAT5A_04	-691	-
STAT6_02	-602	+
STAT5A_03, STAT1_03	-425	+
STAT3_02	-240	-
STAT3_02	-200	+
STAT5A_03, STAT1_03	-200	+
STAT5A_04	-4	-
STAT6_01, STAT4_01	+63	-
STAT1_02	+466	+
STAT1_02, STAT5A_04, STAT5A_03, STAT1_03	+558	+
STAT6_02	+645	+
STAT3_02, STAT5A_03, STAT1_03	+665	+
STAT6_02	+701	+
STAT5A_03, STAT1_03	+744	+
STAT6_01, STAT4_01	+901	-
STAT5A_03, STAT1_03	+908	-
STAT5A_04	+1034	+
STAT5A_04	+1074	+
STAT5A_04	+1227	+

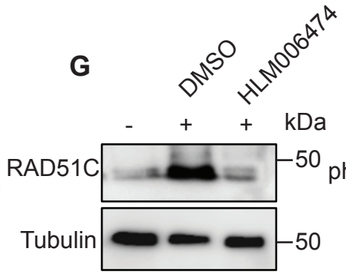
E



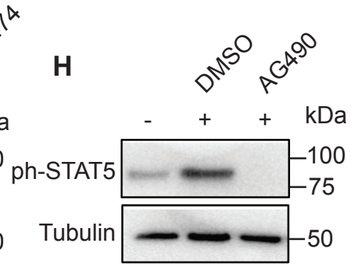
F



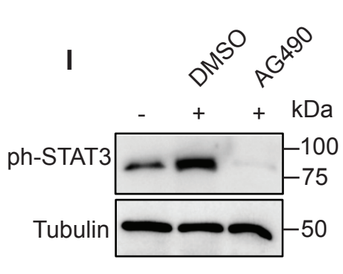
G



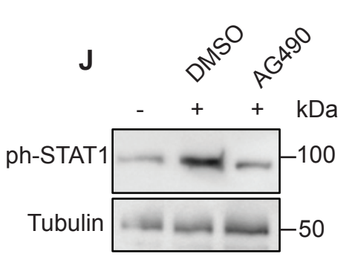
H



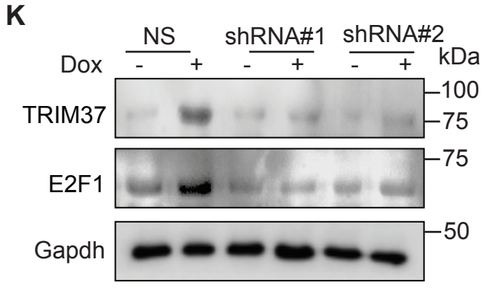
I



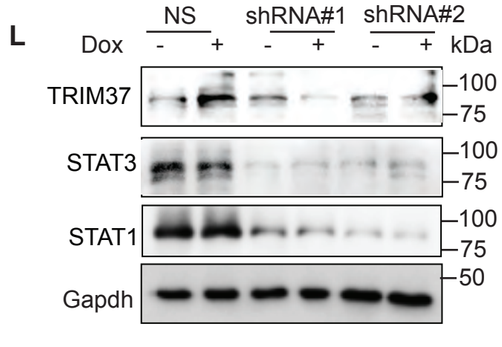
J



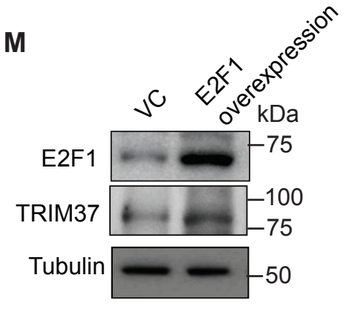
K



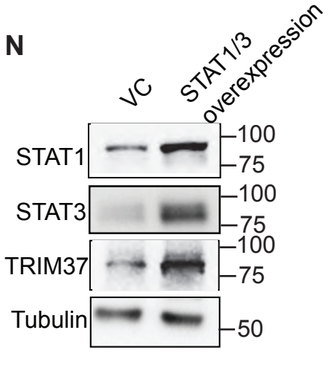
L



M



N



Supplementary Figure 4. Chemotherapy activates ATM/E2F1/STAT axis to upregulate TRIM37 in TNBC. (A) Immunoblot in MCF7 (*Left*) and MCF10a (*Right*) cells treated with Dox for 0, 2, 4 and 8 hrs. Gapdh is the loading control. (B) Immunoblot in MDA MB 468 cells expressing either vector control (VC), or wild type *TP53* (TP53) following treatment with Dox. Tubulin is the loading control. (C-D) List of putative E2F- (C) and STAT- (D) binding sites in *TRIM37* promoter region (-1500 to +1500). (E) ChIP-Seq tracks of E2F1, STAT1 and STAT3 on the *TRIM37* promoter identified by ENCODE project viewed in UCSC genome Browser. (F-J) Immunoblots in MDA MB 468 cells treated with KU555933 (F), HLM006474 (G), or AG490 (H-J). Tubulin is the loading control. (K) Immunoblot in MDA MB 468 cells expressing NS or E2F1 shRNA (#1, #2) following treatment with Dox. Gapdh is the loading control. (L) Immunoblot in MDA MB 468 cells expressing NS or STAT1 and STAT3 shRNA (#1, #2) following treatment with Dox. Gapdh is the loading control. (M-N) Immunoblot in MCF10AT cells over expressing E2F1 (M) or STAT1/3 (N). Gapdh is the loading control. Error bars indicate standard deviation and range of at least three biological replicates. * $p<0.05$; ** $p<0.01$: *** $p<0.001$.