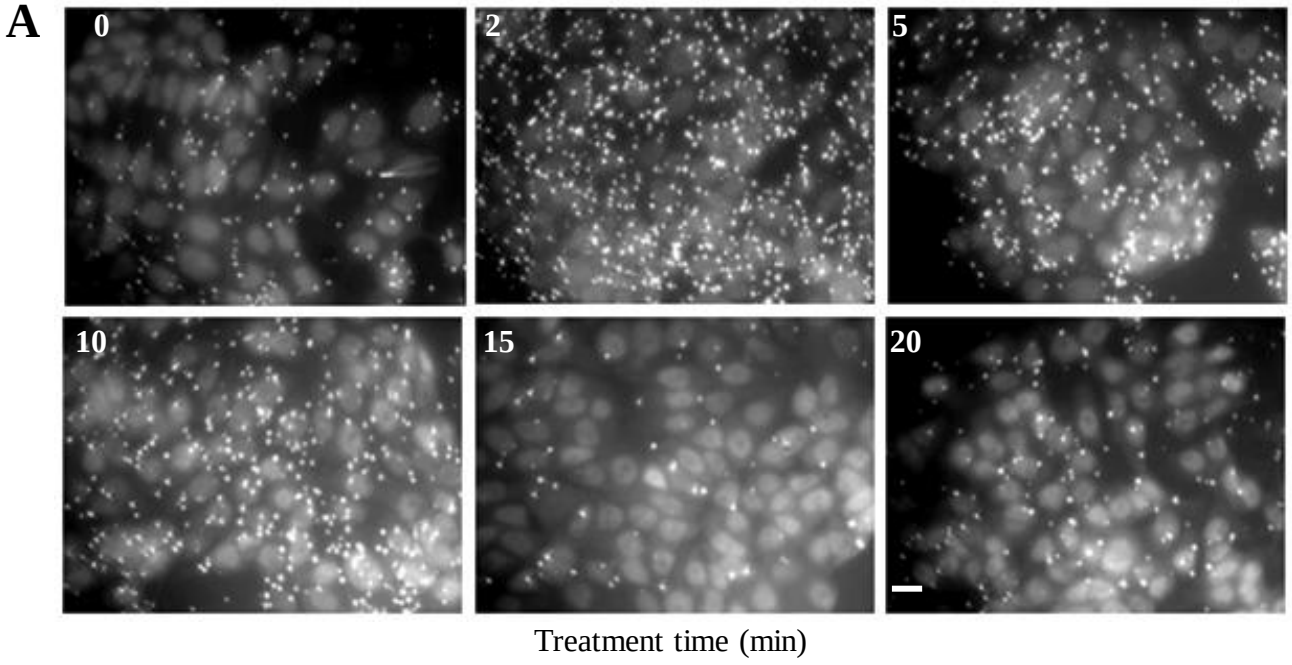
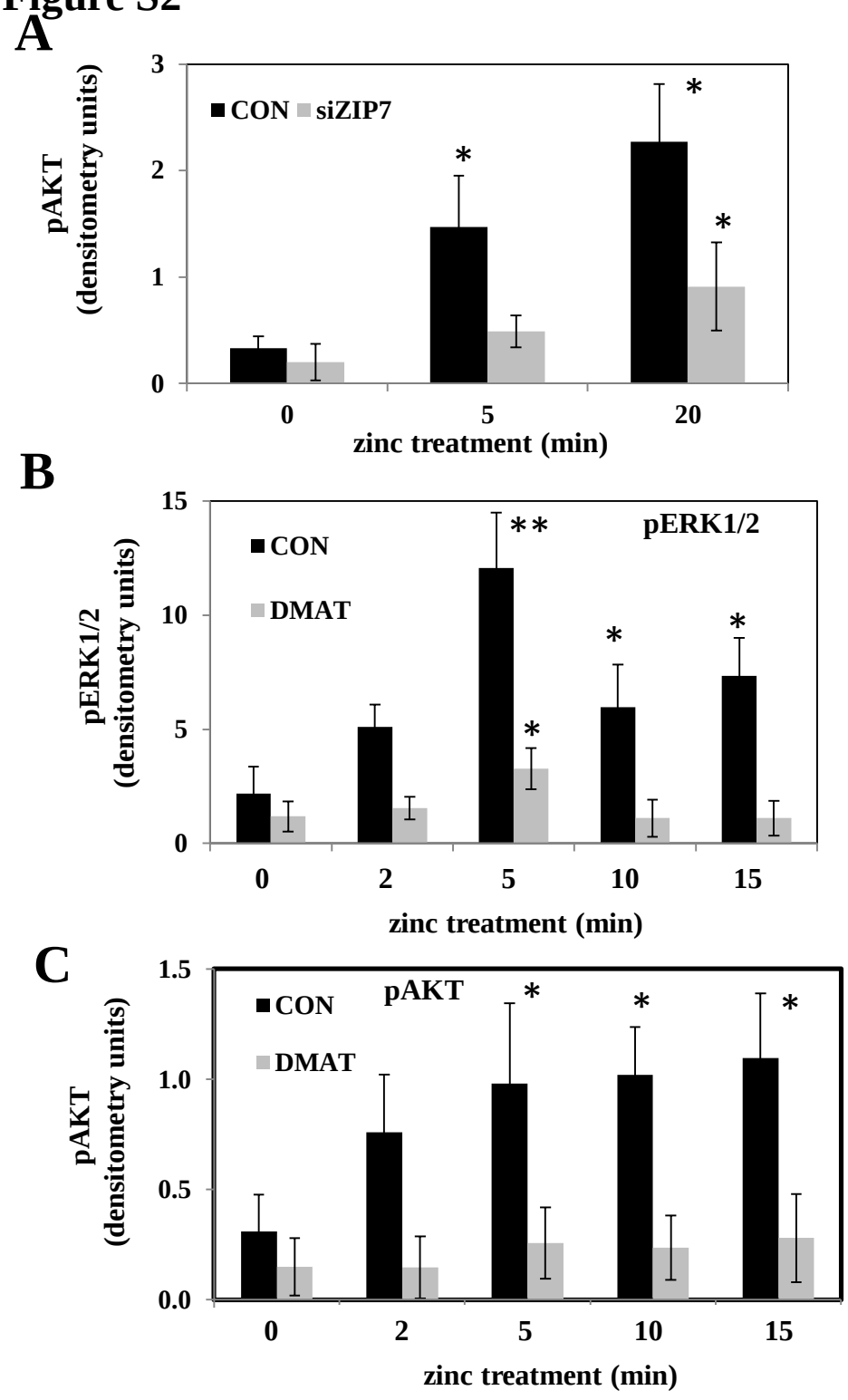
Supplementary Figures

Figure S1



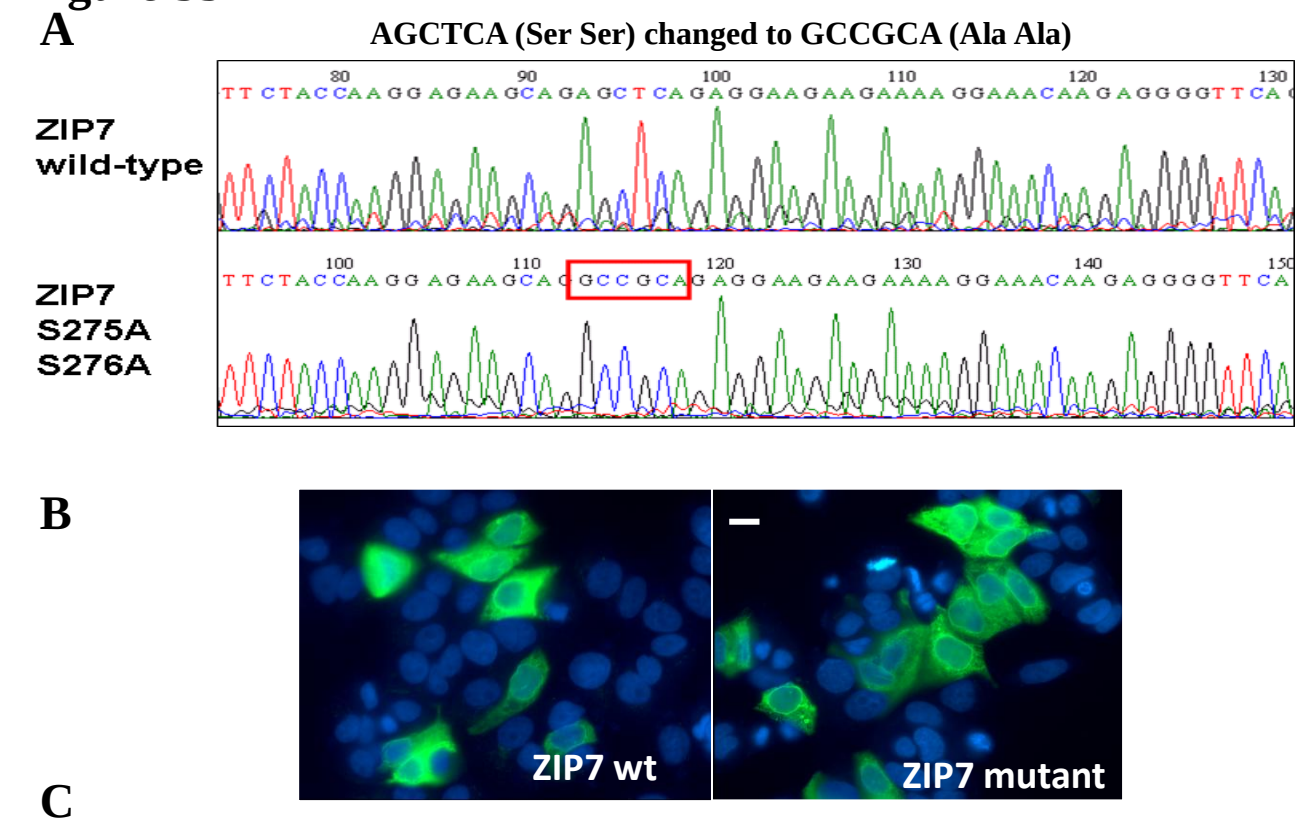
Proximity Ligation assay images and control results.(A) Representative figures of proximity ligation assay of ZIP7 and CK2α stimulated with zinc in Fig 1E Scale bar = 10μm. (B) Representative figures of no antibody controls for proximity ligation assay in Figs 1E and 4B. Scale bar = 10μm. (C) Control results for proximity ligation assay lacking single and both antibodies and representative of n=3 experiments and expressed as mean ±SD

Figure S2



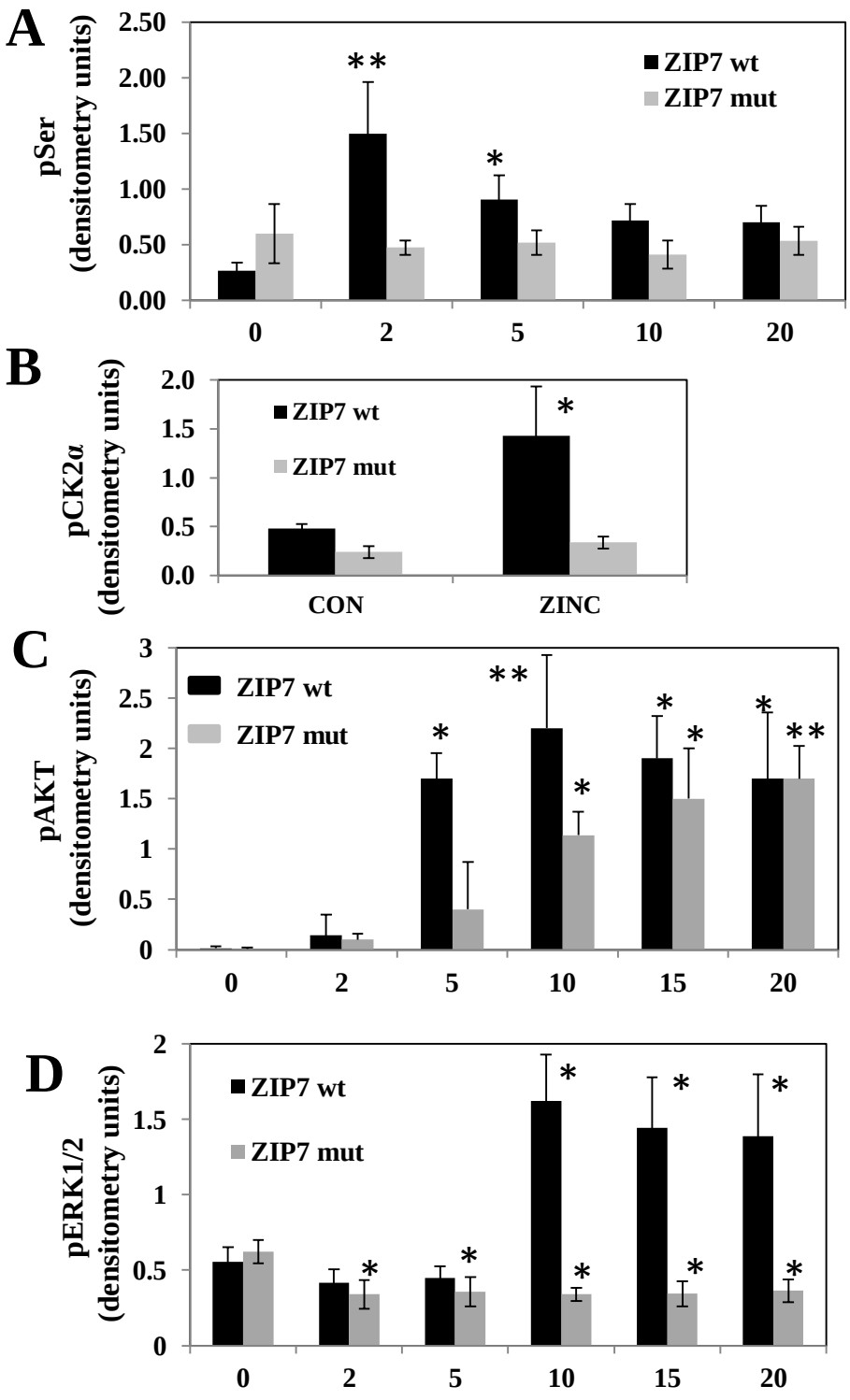
Densitometry analysis of pooled Western Blot results for Fig. 2. (A) Densitometry analysis of pooled Western Blot results from Fig 2D from n=3 experiments and expressed as mean ±SD. * denotes significance from time zero ($P \leq 0.05$) . (B) Densitometry analysis of pooled Western Blot results from Fig 2E from n=3 experiments and expressed as mean ±SD. * denotes significance from time zero ($P \leq 0.05$) and ** denotes $P \leq 0.001$. (C) Densitometry analysis of pooled Western Blot results from Fig 2E from n=3 experiments and expressed as mean ±SD. * denotes significance from time zero ($P \leq 0.05$) .

Figure S3



Characterisation of ZIP7 mutants and ZIP7 antibody.(A) Sequencing demonstration of S275 and S276 mutated to A275 and A276 in ZIP7 sequence. (B) MCF-7 cells transfected with either wild-type or mutant ZIP7 and probed with V5 antibody conjugated to Alexa-Fluor 488 (green). Nuclei stained blue with DAPI. Scale bar = 10µm. (C) MCF-7 cells transfected with wild-type ZIP7 and probed with ZIP7 antibody conjugated to Alexa-Fluor 488 (green), V5 antibody conjugated to Alexa-Fluor 594 (red) and nuclei stained blue with DAPI. Scale bar = 10µm.

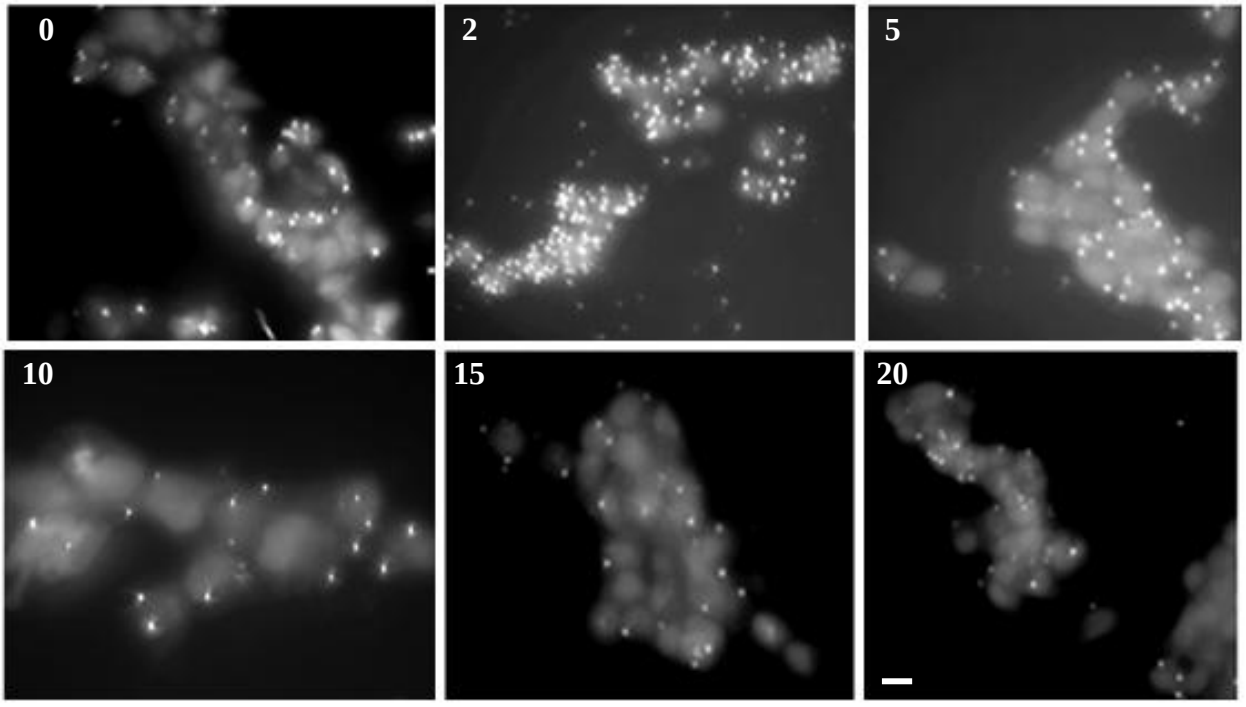
Figure S4



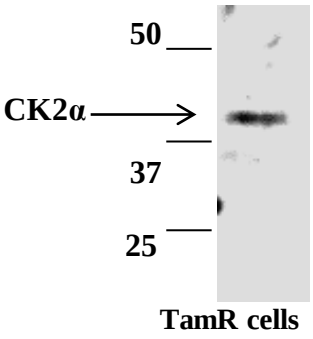
Densitometry analysis of pooled Western Blot results for Fig.3.(A) Densitometry analysis of pooled Western Blot results from Fig 3A from n=3 experiments and expressed as mean ±SD. * denotes significance from time zero ($P \leq 0.05$) and ** denotes ($P \leq 0.001$). (B) Densitometry analysis of pooled Western Blot results from Fig 3C from n=3 experiments and expressed as mean ±SD. * denotes significance from time zero ($P \leq 0.05$) . (C) Densitometry analysis of pooled Western Blot results from Fig 3E from n=3 experiments and expressed as mean ±SD. * denotes significance from time zero ($P \leq 0.05$) and ** denotes ($P \leq 0.001$) . (D) Densitometry analysis of pooled Western Blot results from Fig 3E from n=3 experiments and expressed as mean ±SD. * denotes significance from time zero ($P \leq 0.05$) .

Figure S5

A



B



Proximity ligation assay images and CK2α antibody control. (A) Representative figures of proximity ligation assay of ZIP7 and CK2α stimulated with EGF and ionomycin in Fig 4B Scale bar = 10μm. (B) CK2α antibody recognises a single band on Western Blot of appropriate size in TamR cells