Figure S1. Raw data of the effect of TRPC7 on intracellular Ca^{2+} mobilization in lung adenocarcinoma cells. Intracellular Ca^{2+} responses were measured using Ca^{2+} imaging after treating (A) TRPC7 knockdown H1299 and (B) TRPC7-overexpressing BEAS-2B cells with OAG. Lower panel: Mean area under the intracellular Ca^{2+} response curves of cells after OAG application. TG-induced Ca^{2+} influx in (C) TRPC7 knockdown H1299 and (D) TRPC7-overexpressing BEAS-2B cells. OAG, 1-oleoyl-2-acetyl-sn-glycerol; OE, overexpression; si, small interfering RNA; TG, thapsigargin; TRPC7, transient receptor potential canonical 7.

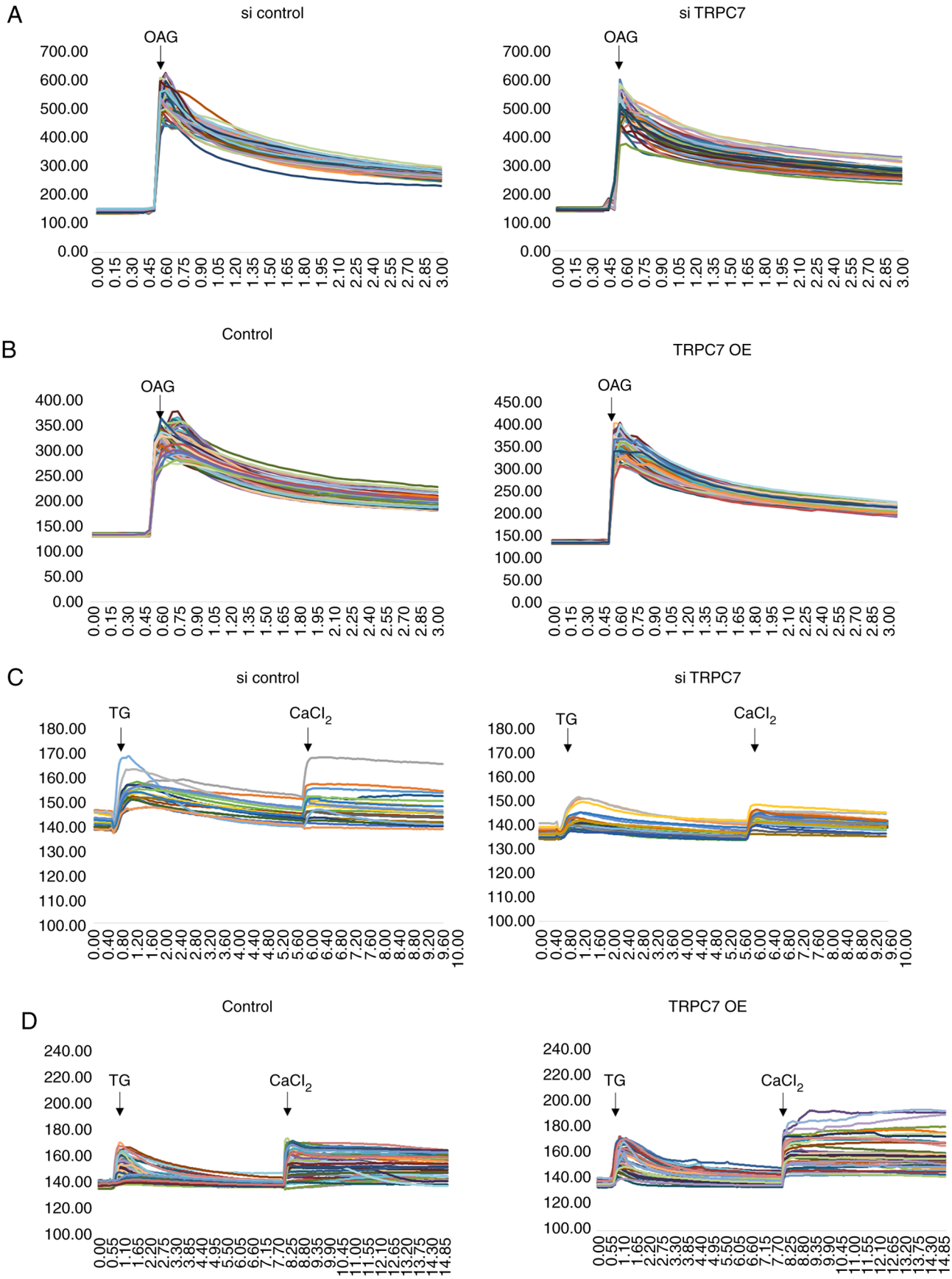

Figure S2. Semi-quantification of the protein expression levels of p-CaMKII, CaMKII, p-AKT, t-AKT, p-ERK and t-ERK (as in Fig 5B and D). Data were normalized to the protein expression of GAPDH as the internal control, in (A) TRPC7 knockdown H1299 cells and (B) TRPC7-overexpressing BEAS-2B cells with or without treatment with the TRPC7 inhibitors, SKF96365 and 2-APB. Statistical analysis was performed using an unpaired Student's t-test. n=7, data were presented as mean ± SD. *P<0.05, **P<0.01 and ***P<0.001. 2-APB, 2-aminoethyl diphenylborinate; CaMKII, Ca^{2+}/calmodulin-dependent protein kinase II; OE, overexpression; p, phosphorylated (protein); si, small interfering RNA; SKF, SKF96365; t, total (protein); TRPC7, transient receptor potential canonical 7.

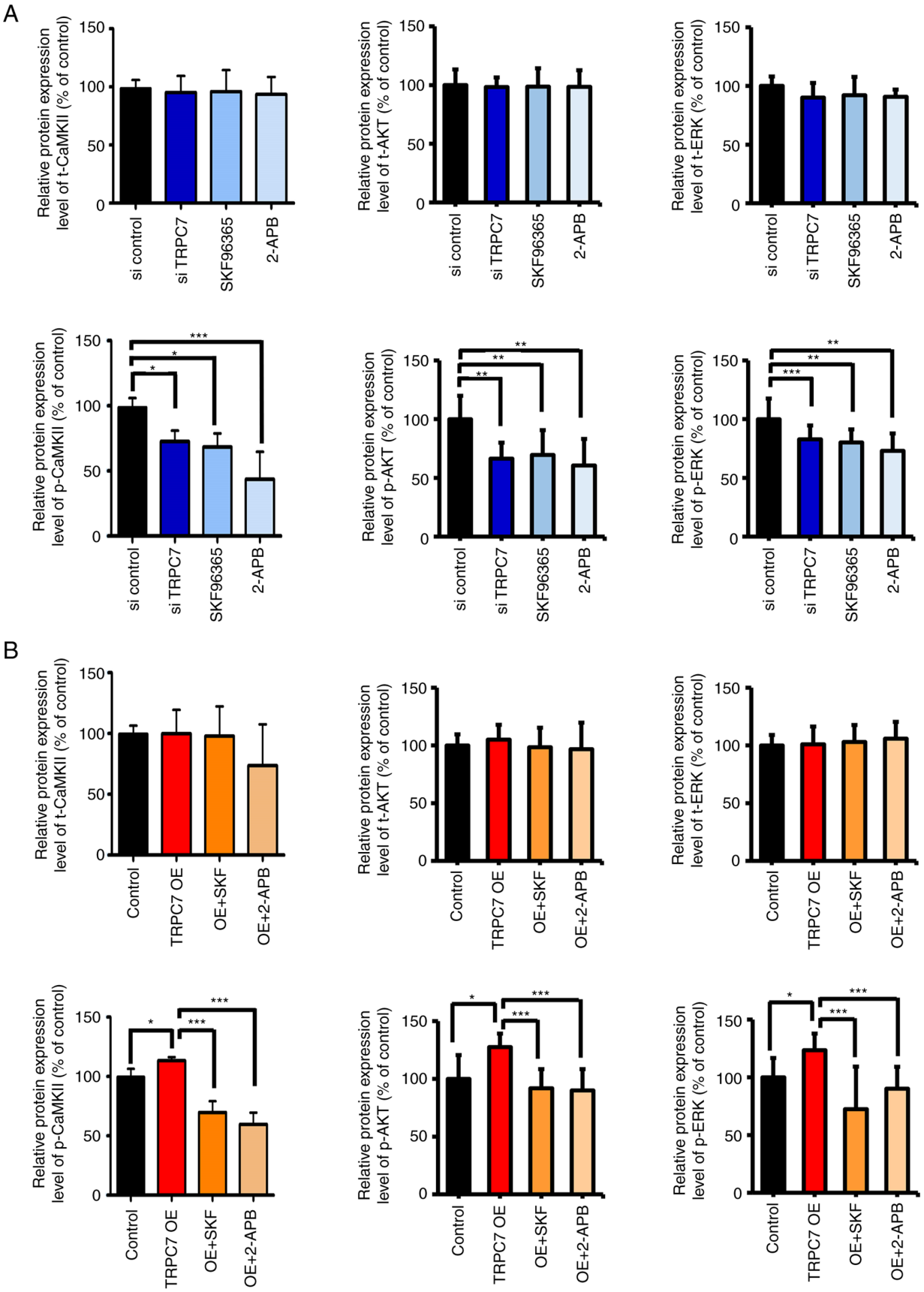

Figure S3. GEO database analysis of the *TRPC7*, *CaMKII*, *AKT*, *ERK1* and *ERK2* genes upregulated in SCLC. *TRPC7*, *CaMKII*, *AKT*, *ERK1* and *ERK2* upregulated genes were analyzed in the GSE149507 dataset. A total of 18 pairs of SCLC tumor and adjacent lung tissues were obtained from surgical resection and gene expression profiling was performed using a microarray. Raw data extracted from GEO were replotted and statistically analyzed using paired Student's t-test. Data were presented as mean ± SD. ***P<0.001. GEO, Gene Expression Omnibus; CaMKII, Ca^{2+}/calmodulin-dependent protein kinase II; NL, normal lung (tissue); SCLC, small cell lung cancer; TRPC7, transient receptor potential canonical 7.