Expanded View Figures

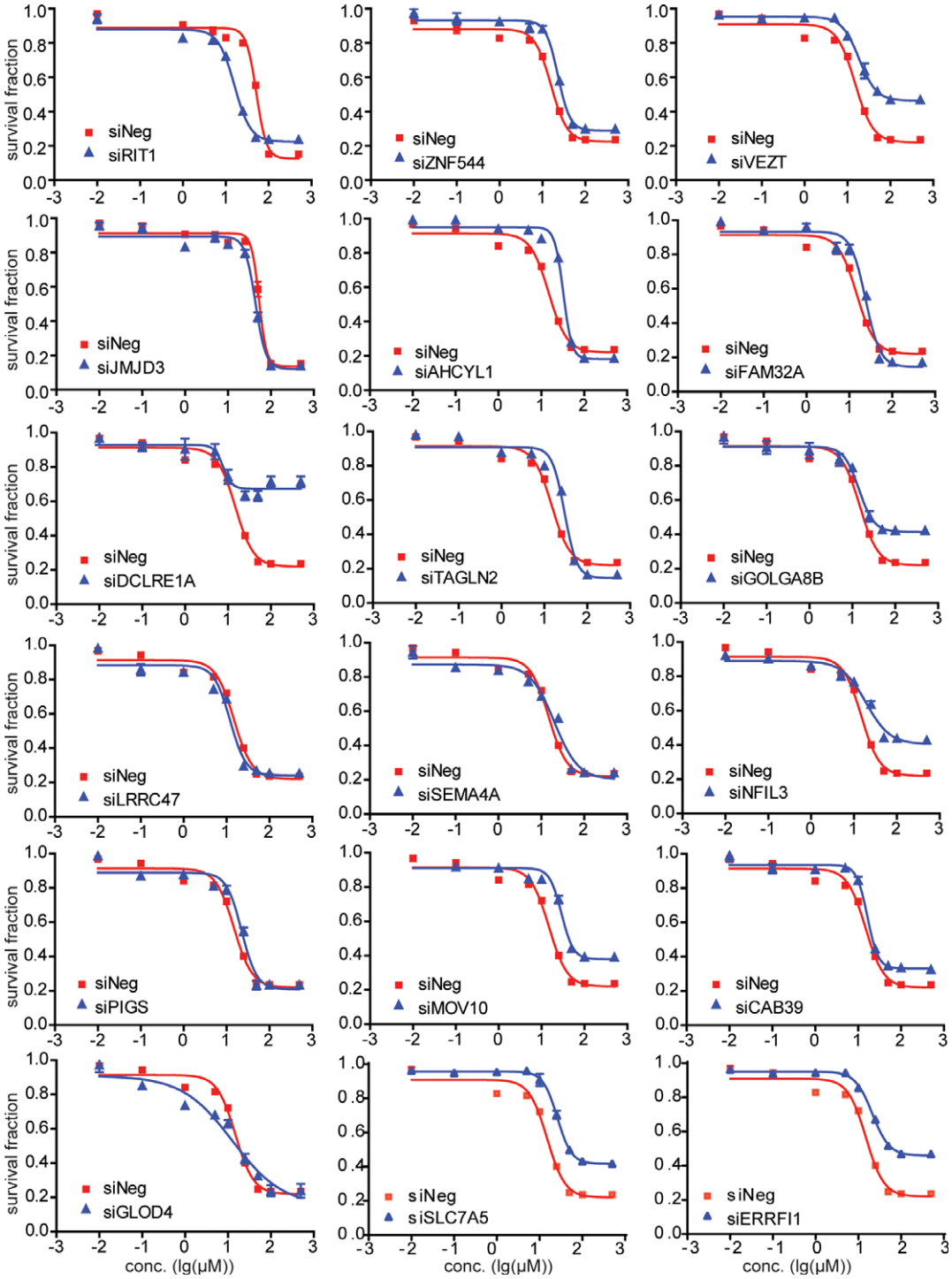

Figure EV1. Functional validation of candidate genes in human tumor cell lines.
SU86 cells were transfected with specific siRNA and then treated with 0, 0.01, 0.1, 1, 10, 25, 50, 100, and 500 μM TCN for 72 h. Cell survival was determined. The *x*-axis indicates drug dose, and the *y*-axis indicates the survival fraction after TCN exposure. Each point shows the mean values for three independent experiments; error bars represent ± SEM.

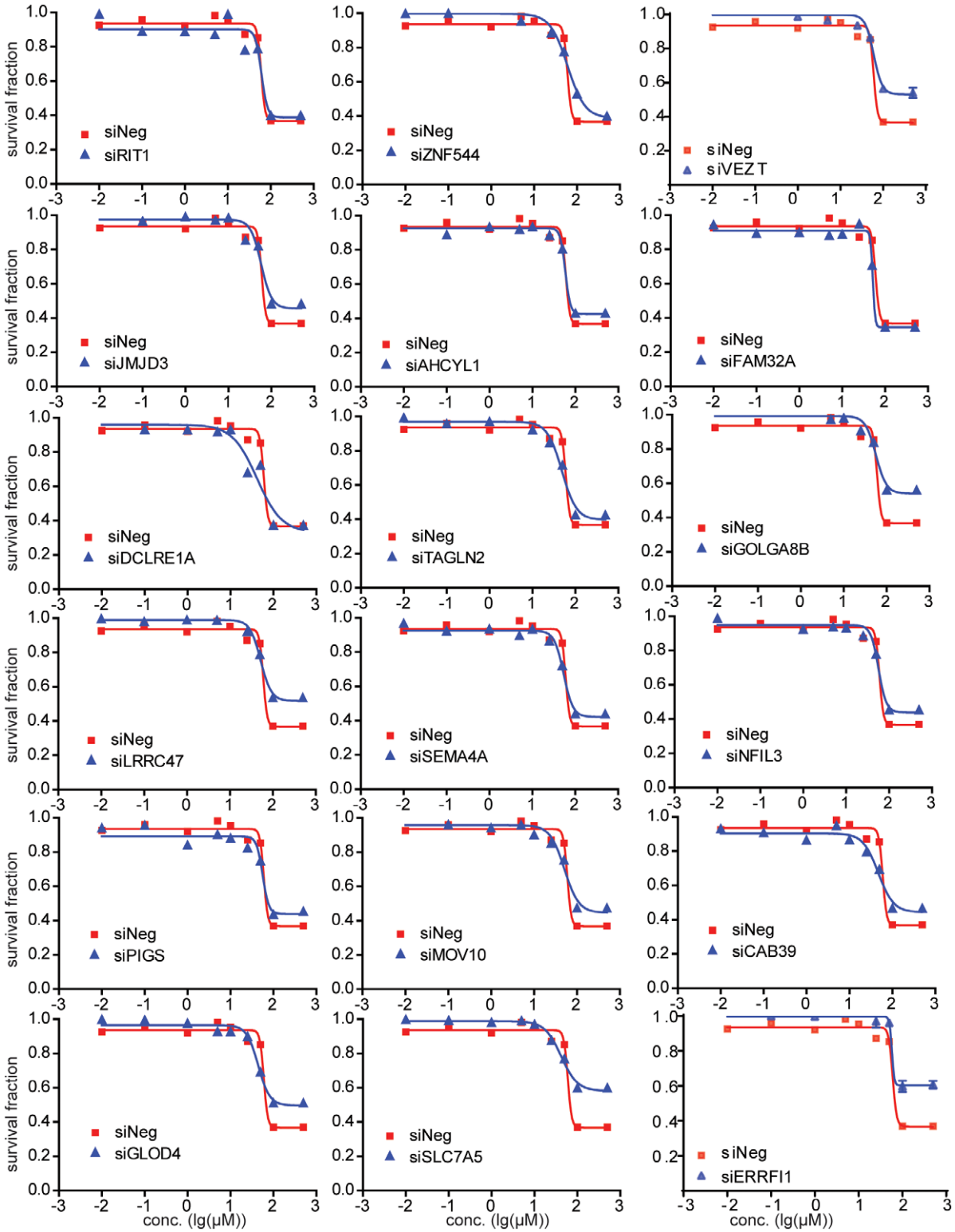

Figure EV2. Functional validation of candidate genes in human tumor cell lines.
MDA-MB-231 cells were transfected with specific siRNA and then treated with 0, 0.01, 0.1, 1, 10, 25, 50, 100, and 500 μM TCN for 72 h. Cell survival was determined. Each point shows the mean values for three independent experiments; error bars represent ± SEM.

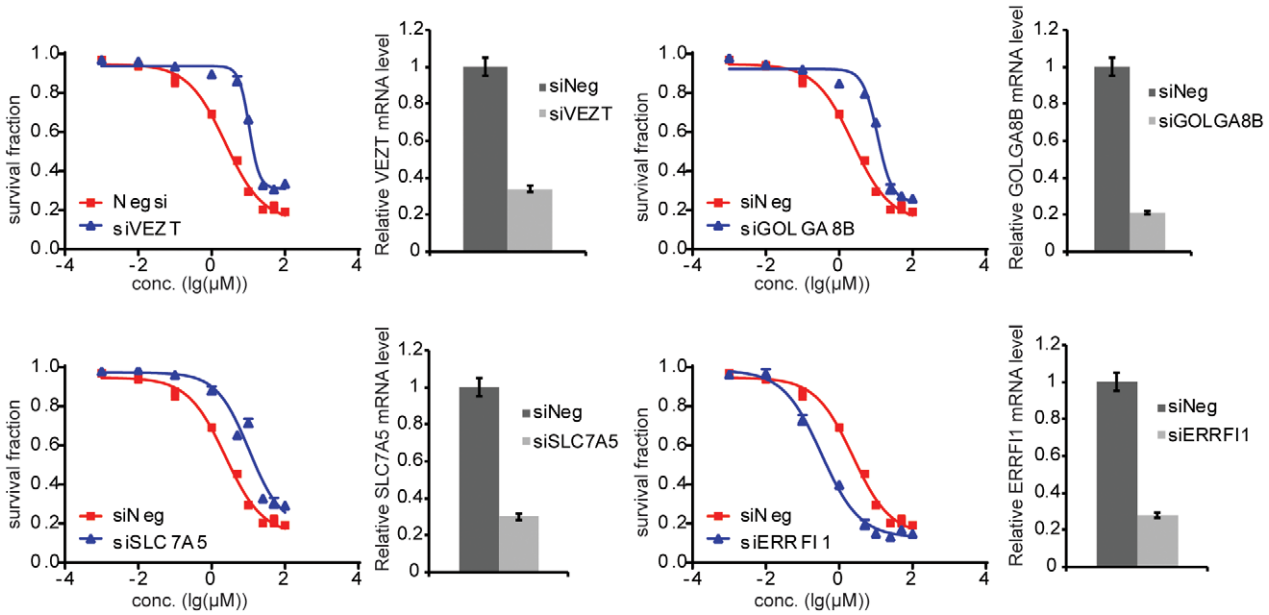

Figure EV3. Functional validation of candidate genes in LCL.
LCL were transfected with specific siRNA and then treated with 0, 0.01, 0.1, 1, 10, 25, 50, 100, and 500 μM TCN for 72 h. Cell survival was determined using CYQUANT assay. Knockdown efficiency was determined using qRT–PCR. Each point shows the mean values for three independent experiments; error bars represent ± SEM.

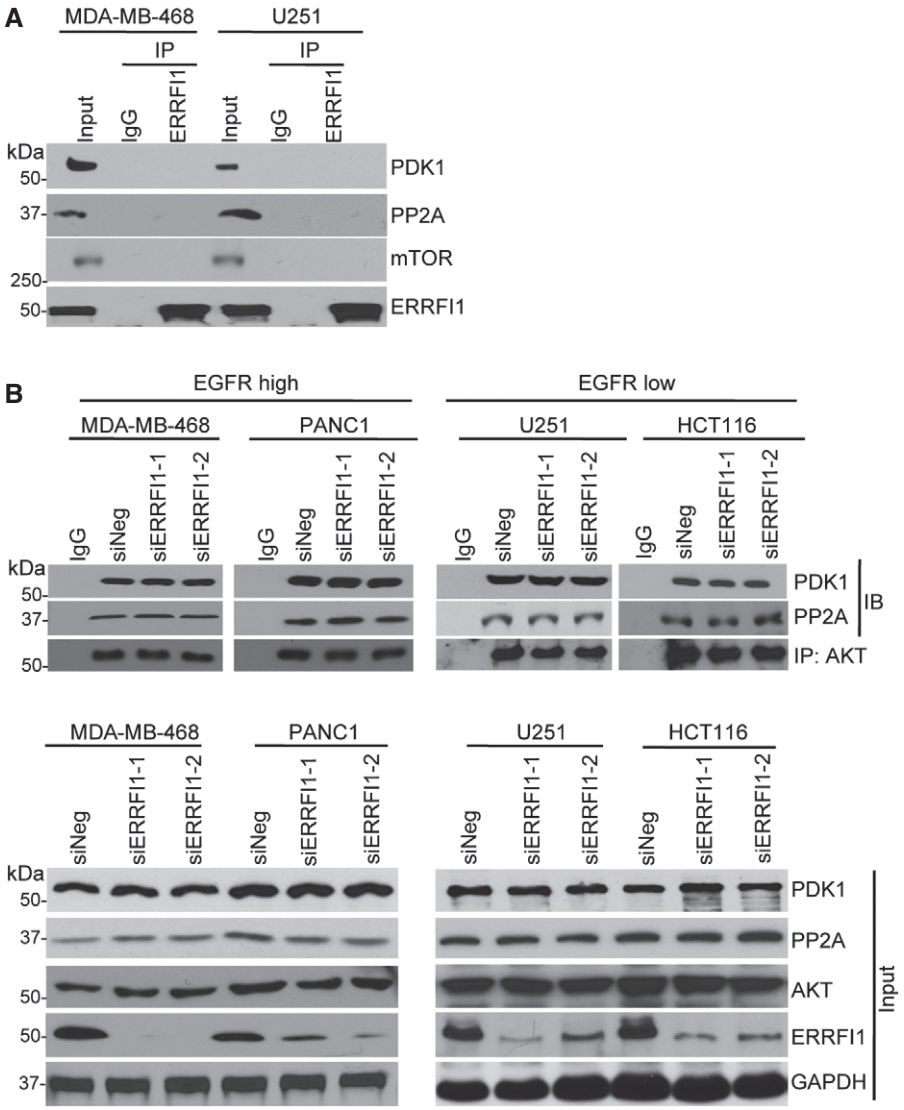

Figure EV4. ERRFI1 does not directly regulate the phosphorylation of AKT at Thr308.

A MDA-MB-468 and U251 cell lysates were subjected to immunoprecipitation with control IgG or anti-ERRFI1 antibody. The immunoprecipitates were blotted with the indicated antibodies.

B MDA-MB-468, PANC1, U251, and HCT116 cells were transfected with siERRFI1. Cell lysates were subjected to immunoprecipitation with control IgG or anti-AKT antibody. The immunoprecipitates were blotted with the indicated antibodies.

Source data are available online for this figure.

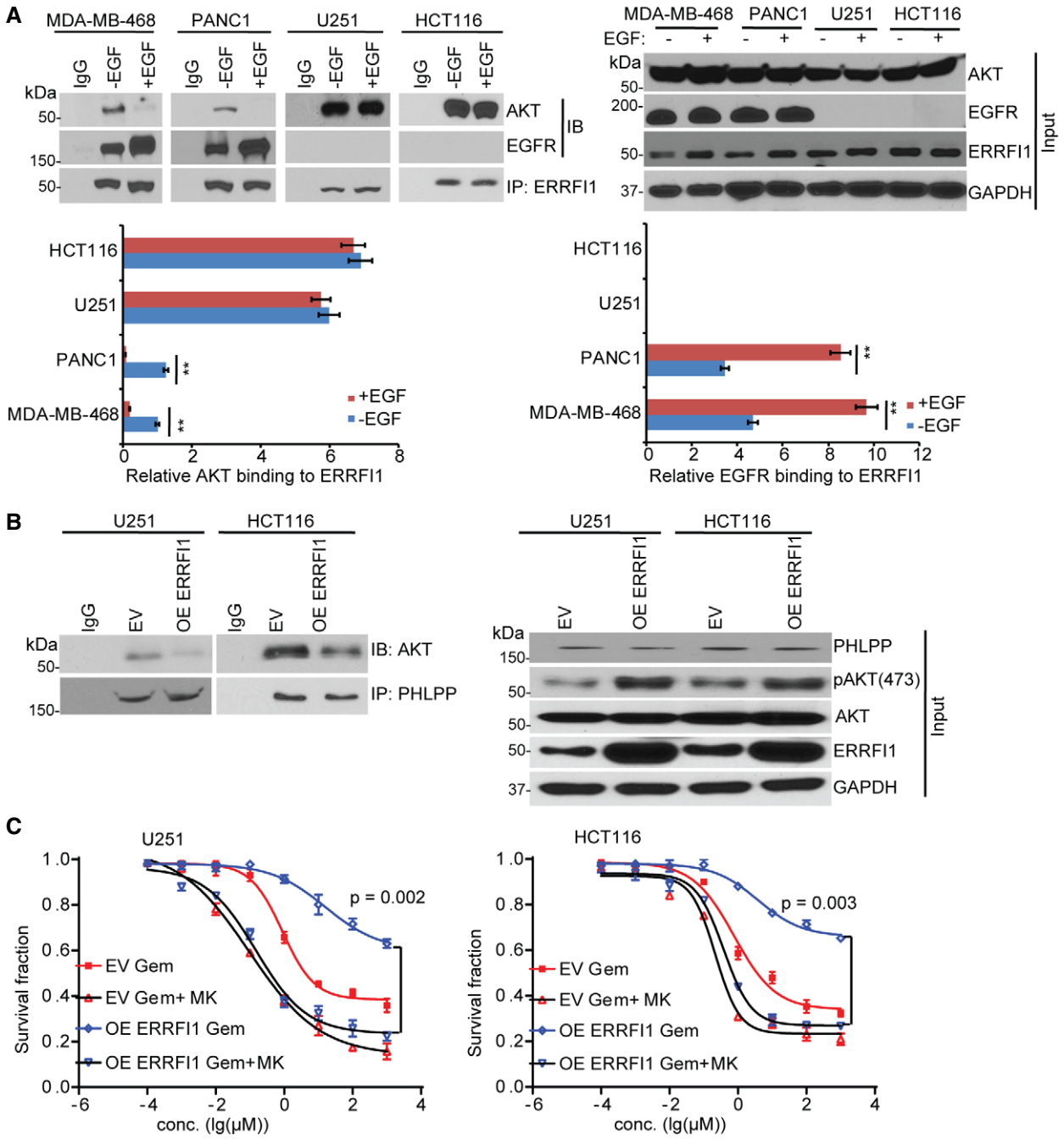

Figure EV5. ERRFI1 regulates AKT-PHLPP interaction.

A MDA-MB-468, PANC1, U251, and HCT116 cells were serum-starved for 36 h and then treated with EGF (100 ng/ml) for 30 min prior to cell lysis. Cells lysates were subjected to immunoprecipitation with control IgG or anti-ERRFI1 antibody. The immunoprecipitates were blotted with the indicated antibodies. The ERRFI1-AKT and ERRFI1-EGFR interaction was quantified using ImageJ. The immunoprecipitated ERRFI1 levels were normalized for each interaction and then corrected for MDA-MB-468 no EGF treatment. The interaction in no EGF-treated (-EGF) MDA-MB-468 is set to 1. Error bars represent ± SEM of three independent experiments. The significant difference between vehicle and EGF treatment is indicated by: $^{**}P < 0.01$. Statistical analyses were performed with Student's *t*-test.

B U251 and HCT116 cells were transfected with ERRFI1 construct. After 48 h, cells were lysed and subjected to immunoprecipitation with control IgG or anti-PHLPP antibody. The immunoprecipitates were then blotted with the indicated antibodies.

C U251 and HCT116 cells from (B) were treated with increasing dose of gemcitabine (Gem) alone or in combination with 10 μM MK-2206 2HCl (MK) for 72 h. Cell survival was then determined. Each point shows the mean values for three independent experiments; error bars represent ± SEM.

Source data are available online for this figure.