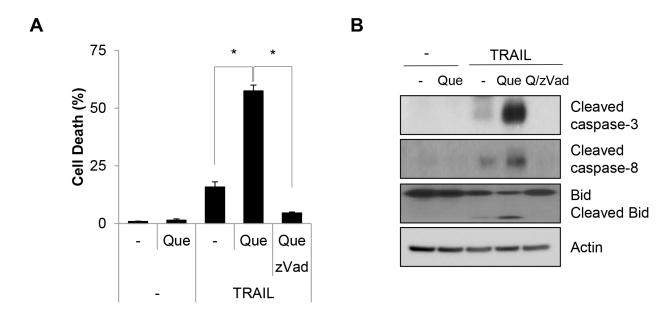
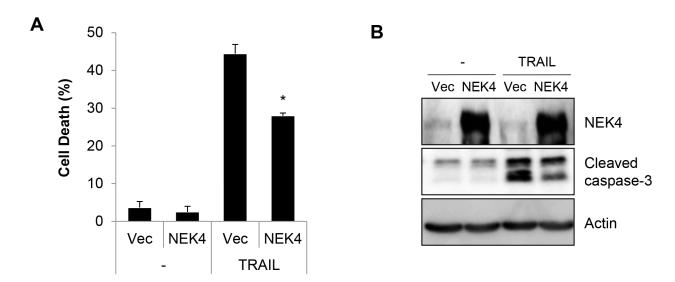
## Inhibition of never in mitosis A (NIMA)-related kinase-4 reduces survivin expression and sensitizes cancer cells to TRAIL-induced cell death

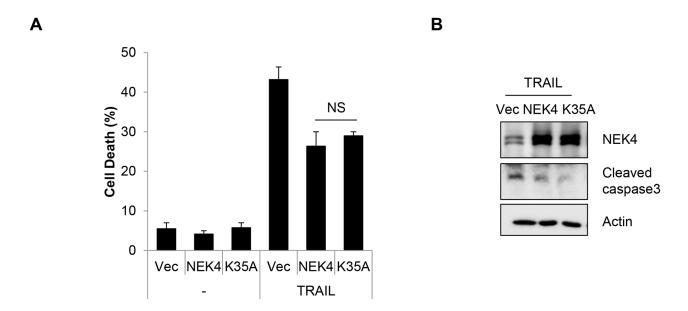
## **SUPPLEMENTARY FIGURES**



**Supplementary Figure S1: Quercetin treatment increases TRAIL-mediated death in A549 cells. A, B.** A549 cells were treated with quercetin (Que, 50 mM) alone or Que and zVAD (40 mM) and were additionally exposed to TRAIL (20 ng/ml) for 4 h. Cell death was determined by FACS analysis and Annexin-V and PI staining (A). The cells were further analyzed by Western blotting with the indicated antibodies (B).



Supplementary Figure S2: Overexpression of NEK4 suppresses TRAIL-induced cell death. A. HeLa cells stably overexpressing either a control vector (HeLa/Vec) or NEK4 (HeLa/NEK4) were generated, and treated with TRAIL (20 ng/ml). After 6 h, cell death was determined by the FACS assay. B. HeLa/Vec and HeLa/NEK4 cells were incubated with TRAIL (20 ng/ml) for 6 h, and NEK4 and cleaved caspase-3 expression was confirmed by Western blotting. Data are presented as mean  $\pm$  SEM (n = 3) and were considered significant at \*p < 0.05.



**Supplementary Figure S3:** A kinase dead NEK4 mutant does not alter TRAIL-mediated cell death. A, B. HeLa cells transiently transfected with control a vector (Vec), wild type NEK4 (NEK4), or NEK4 kinase dead mutant (K35A) were treated with TRAIL (20 ng/ml). After 4h treatment, cell death ratio was determined (A). The expression level of NEK4 and cleaved caspase-3 was analyzed by Western blotting (B).