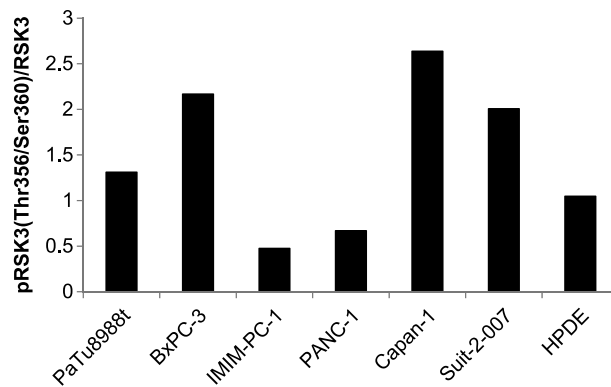
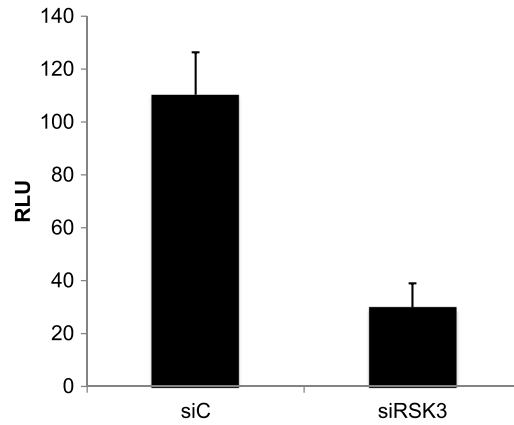


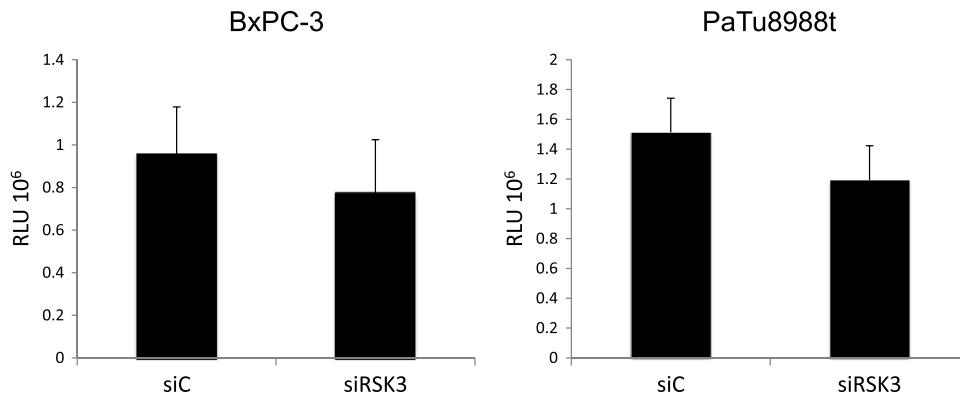
**Figure W1.** Validation of RSK3 antibodies. Protein levels of RSKs and phospho-RSKs were determined in PaTu8988t 48 hours after transient transfection with siRSK3 and siC.



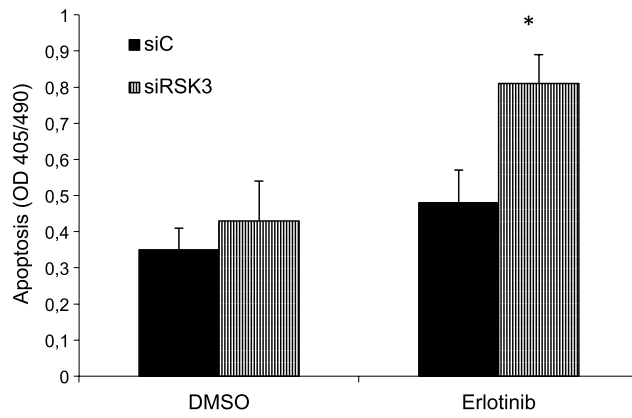
**Figure W2.** Densitometric quantification of Figure 2A shows phospho-RSK3 (Thr<sup>356</sup>) expression normalized to total RSK3 protein expression in various pancreatic cancer cell lines and the pancreatic ductal epithelial cell line HPDE.



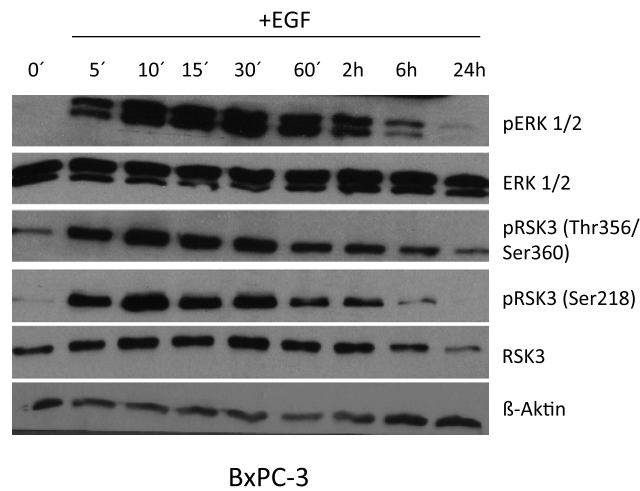
**Figure W3.** Knockdown of RSK3 affects cell viability in PaTu-8988t cells in the presence of erlotinib. PaTu-8988t cells were transfected with siRSK3 and incubated with erlotinib. Cell viability was measured using an MTT assay 48 hours after transfection. Results are representative for three independent experiments.



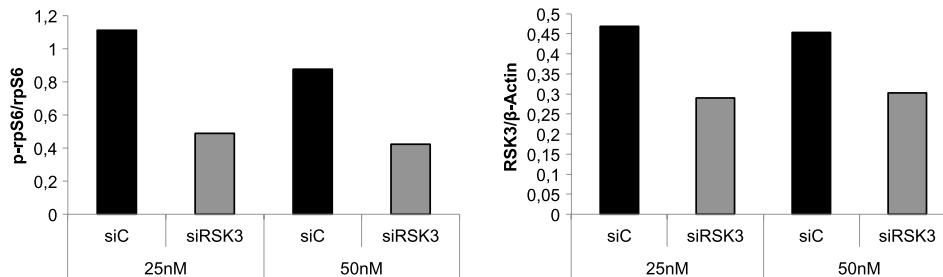
**Figure W4.** Knockdown of RSK3 has no significant effects on tumor cell proliferation in the presence of erlotinib. BxPC-3 and PaTu-8988t cells were transiently transfected with siRSK3 or siC and incubated with erlotinib. Proliferation was measured by BrdU incorporation. Results are representative for three independent experiments.



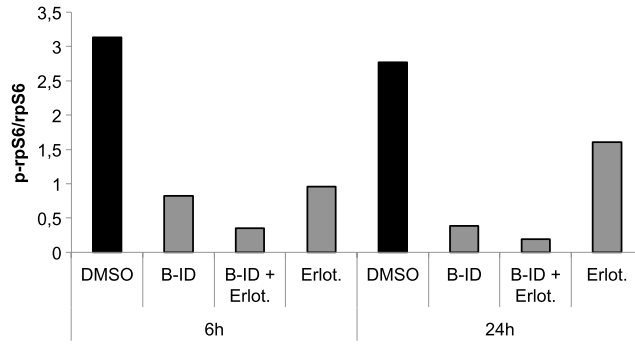
**Figure W5.** RSK3 inhibition induces apoptosis synergistically with erlotinib. BxPC-3 cells were transiently transfected with siRSK3 or siC and treated with erlotinib or solvent DMSO. Apoptosis was determined by a DNA fragmentation assay. \* $P < .05$  compared to siC. Results are representative for three independent experiments.



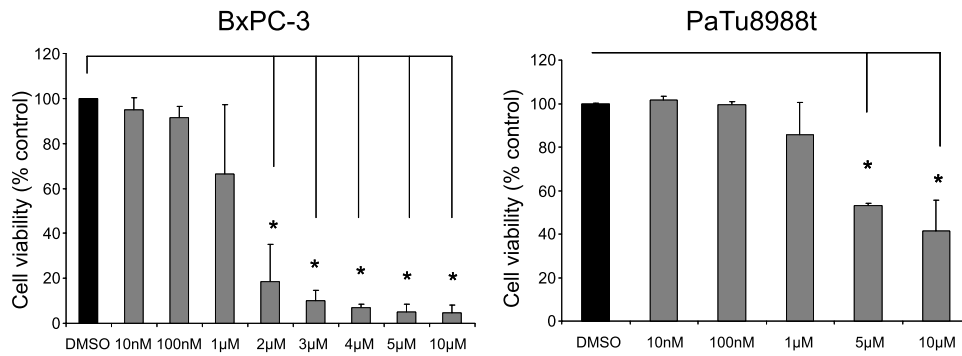
**Figure W6.** Time course of RSK3 activation by recombinant human EGF. BxPC-3 cells were serum starved for 24 hours before EGF treatment (5 ng/ml), and indicated proteins were detected by specific antibodies.



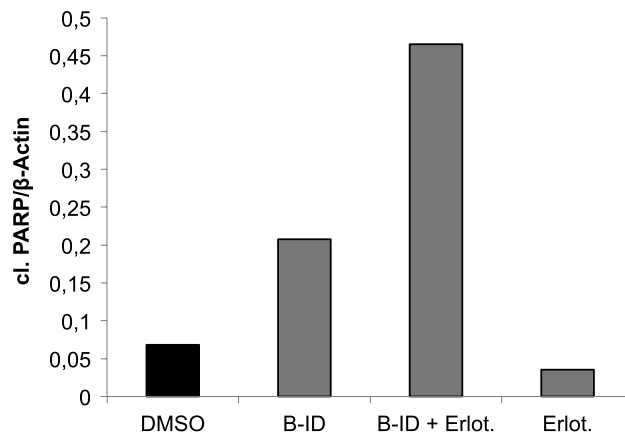
**Figure W7.** Densitometric quantification of Figure 5A demonstrates that RSK3 phosphorylates rpS6. PaTu-8988t cells were transiently transfected with siRSK3 or siC at different siRNA concentrations. Phosphorylated rpS6 normalized to total rpS6 (left panel) or  $\beta$ -actin (right panel), as detected with specific antibodies, was quantified by densitometry.



**Figure W8.** Densitometric quantification of Figure 5B demonstrates the effect of the RSK inhibitor BI-D1870 (5  $\mu\text{M}$ ) and/or erlotinib (10  $\mu\text{M}$ ) for the indicated time points on phospho-rpS6 that was quantified by densitometry and shown as normalized to total rpS6.



**Figure W9.** Dose-response curve of BI-D1870 in PaTu-8988t and BxPC-3 cells. Cells were incubated with BI-D1870 or the solvent DMSO at the indicated concentrations for 24 hours, and cell viability was measured by MTT assay. \* $P < .05$  compared to DMSO-treated control.



**Figure W10.** Densitometric quantification of Figure 7A demonstrates the synergistic effect of RSK inhibition by BI-D1870 and EGFR inhibition by erlotinib on apoptosis in PaTu-8988t cells, as determined by PARP cleavage. PARP cleavage was quantified by densitometry and shown as normalized to  $\beta$ -actin.