



Effects of plasmid-mediated HMGA1 silencing (shHMGA1) on Akt kinase activity. Akt kinase activity was measured using the Akt kinase activity assay (Cell Signalling Technology, Danvers, MA, USA). Akt kinase activity was measured by the ability to phosphorylate of GSK-3. HMGA1 silencing resulted in significant reductions in Akt kinase activities in both MiaPaCa2 and PANC1 cell lines. The Akt levels served as loading controls. * indicated $p < 0.05$ versus control shRNA.