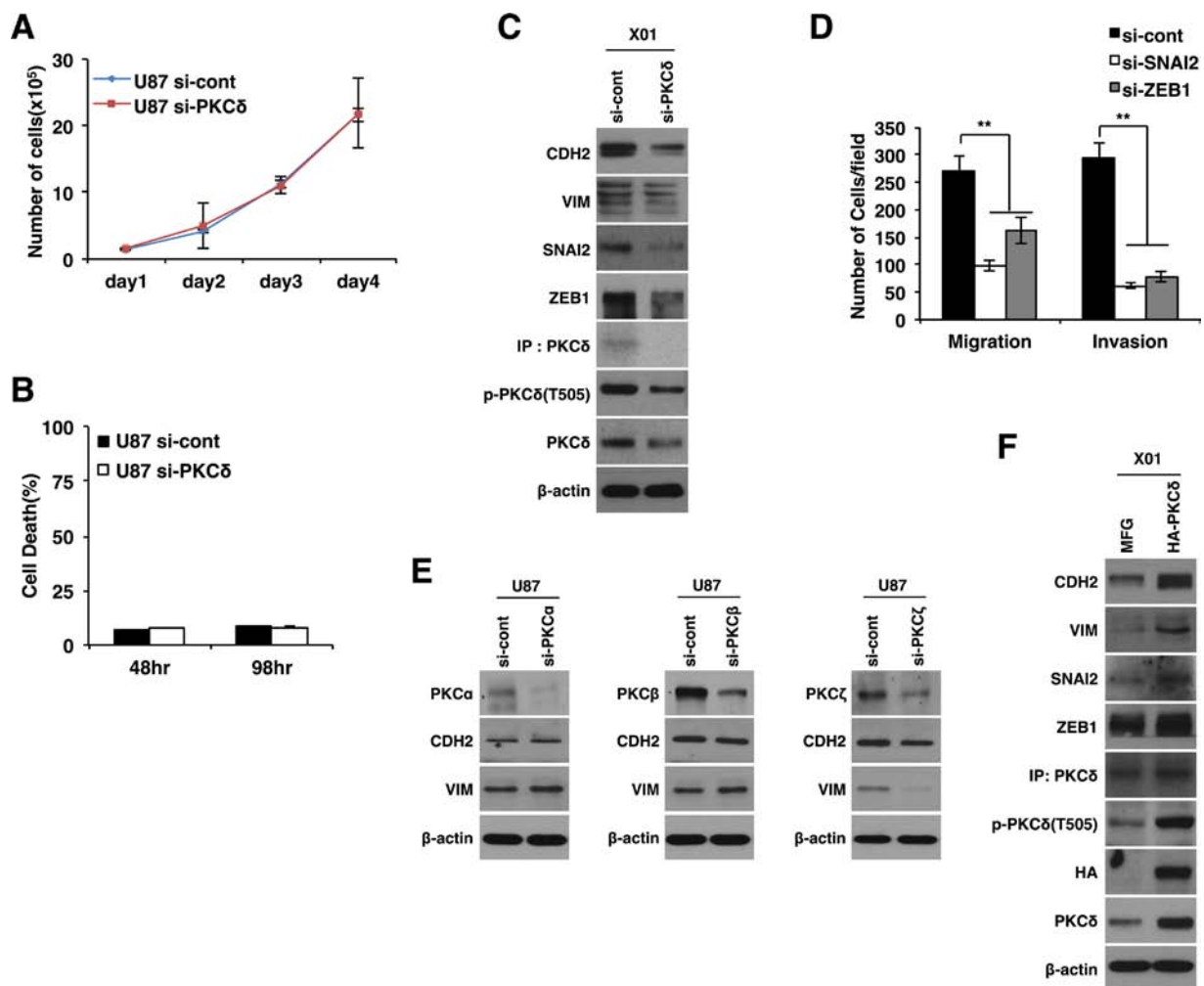
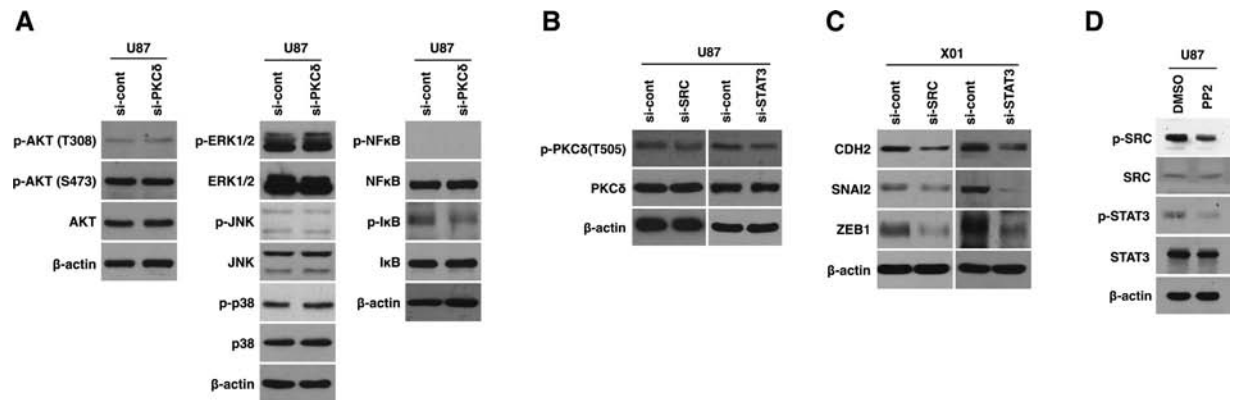


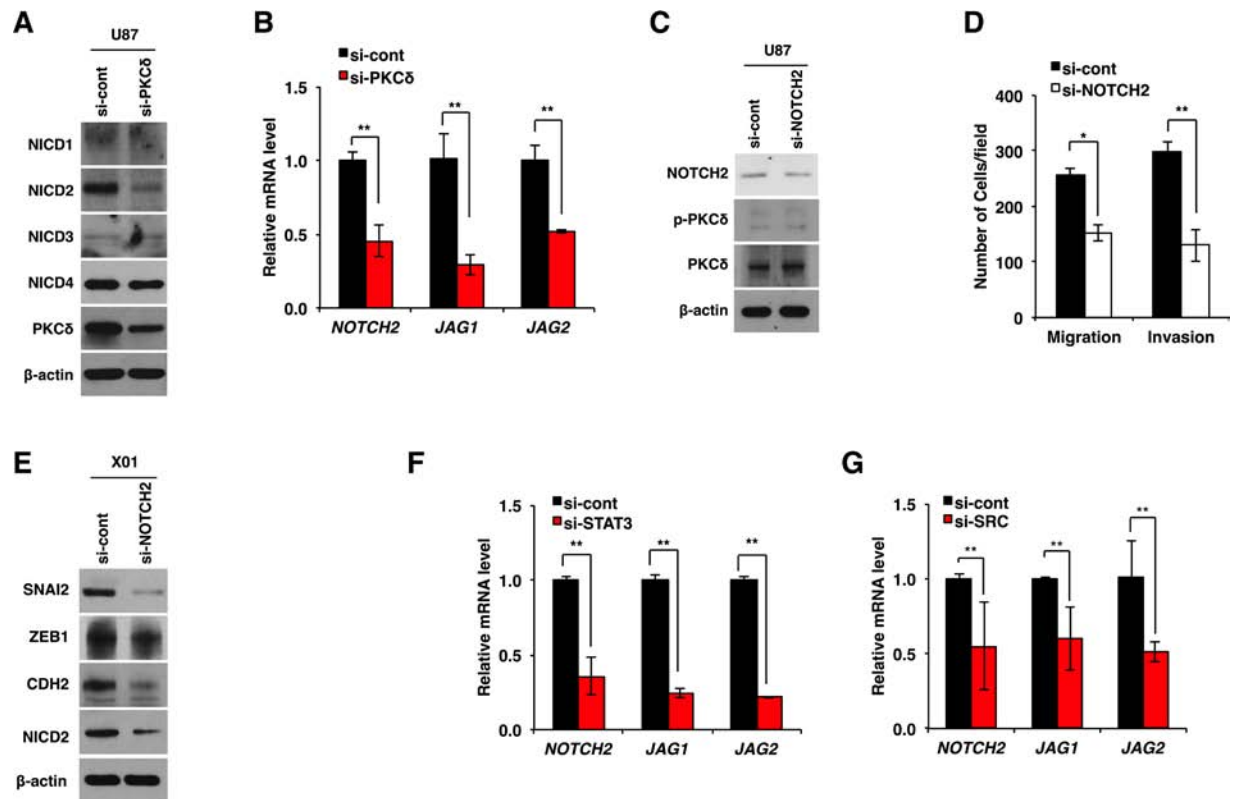
SUPPLEMENTARY FIGURES



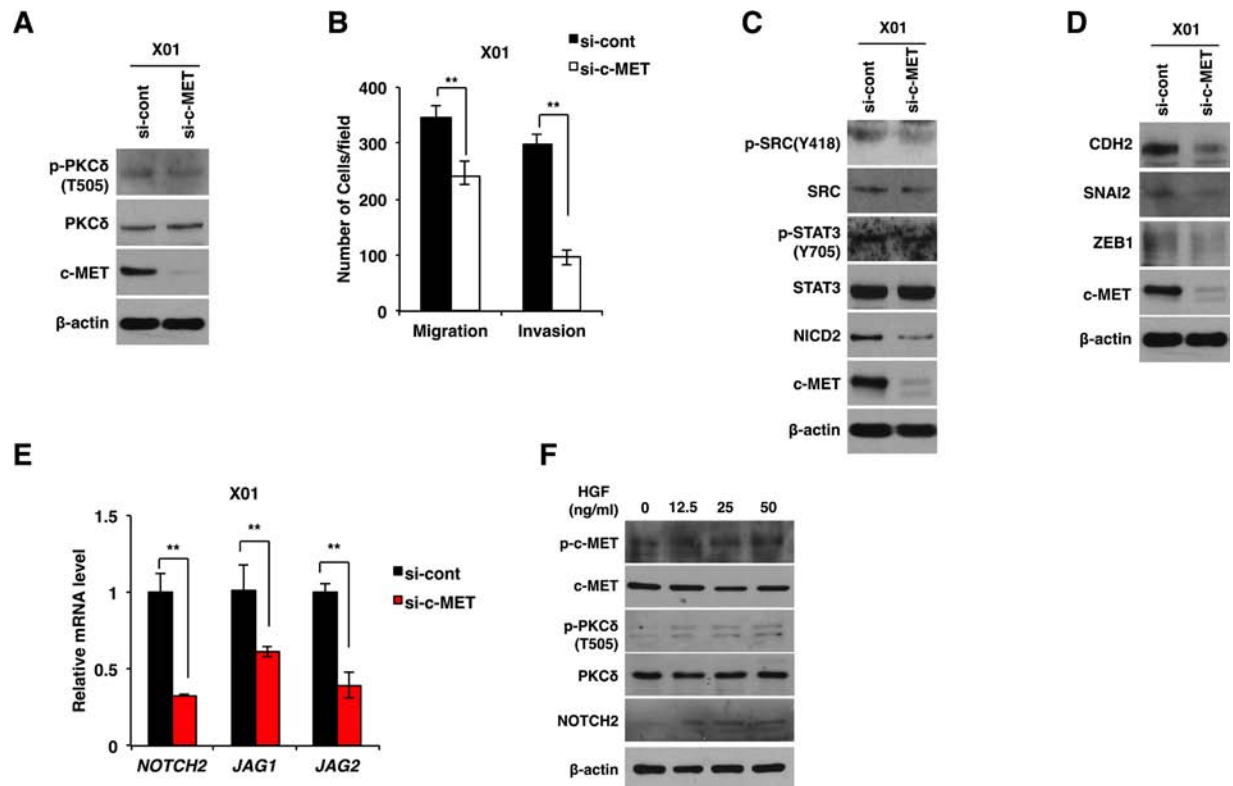
Supplementary Figure S1: Effect of PKC δ on infiltration of GBM cells through mesenchymal transformation. **A.** Cell growth curves of U87 GBM cells transfected with control or PKC δ siRNAs. **B.** Measurement of cell death in U87 GBM cells transfected with control or PKC δ siRNAs by FACS analysis after staining with propidium iodide. **C.** Western blot analysis for mesenchymal cell markers (CDH2, VIM) and regulators (SNAI1, ZEB1, TWIST1 and SNAI2) in X01 GBM cells transfected with control or PKC δ siRNAs. **D.** Migration and invasion assay in U87 GBM cells transfected with control, SNAI2 or ZEB1 siRNAs. **E.** Western blot analysis for mesenchymal cell markers (CDH2, VIM) in U87 GBM cells transfected with siRNA against PKC α , β , ζ or scrambled negative control siRNA. **F.** Western blot analysis for CDH2, VIM, SNAI2 and ZEB1 in X01 GBM cells transduced with empty vector MFG or HA-PKC δ . β -actin was used for a loading control. **, $p < 0.01$ versus control.



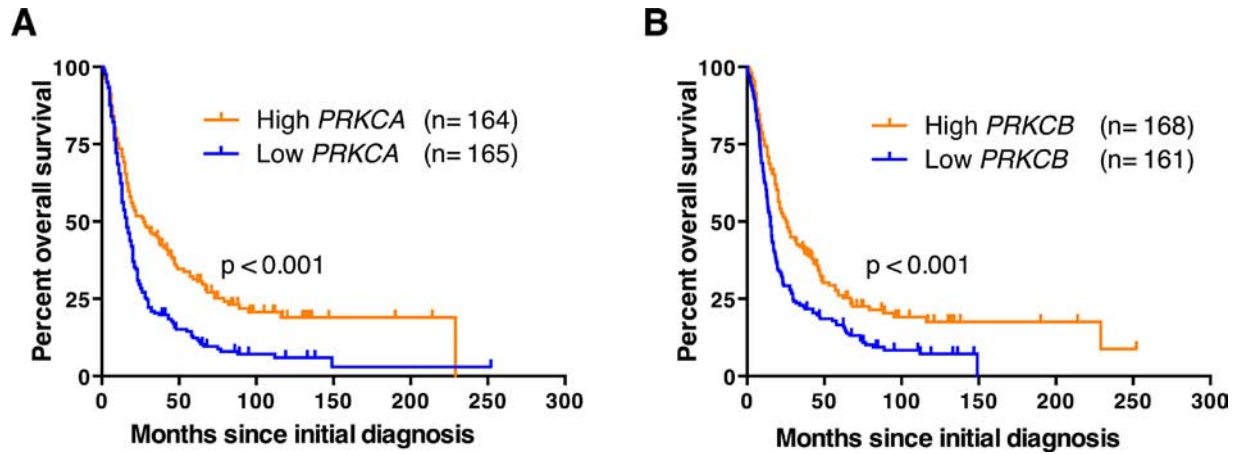
Supplementary Figure S2: Downstream effectors of PKC δ on infiltration of GBM cells through mesenchymal transformation. **A.** Western blot analysis for activation status of AKT, MAPK (ERK, p38, JNK) and NF κ B in U87 GBM cells transfected with control or PKC δ siRNAs. **B.** Western blot analysis for activation status of PKC δ in U87 GBM cells transfected with control or PKC δ siRNAs. **C.** Western blot analysis for CDH2, SNAI2 and ZEB1 in X01 GBM cells transfected with control siRNAs or siRNAs against SRC or STAT3. **D.** Western blot analysis for phosphorylation status of STAT3 after treatment with SRC inhibitor PP2. β -actin was used for a loading control.



Supplementary Figure S3: PKC δ boosts mesenchymal transformation through NOTCH2. **A.** Western blot analysis for NOTCH intracellular domain (NICD)-1, -2, -3, and -4 in U87 GBM cells transfected with control or PKC δ siRNAs. **B.** qRT-PCR for NOTCH2, JAG1 and JAG2 in X01 GBM cells transfected with control or PKC δ siRNAs. **C.** Western blot analysis for phosphorylation status of STAT3 in U87 GBM cells transfected with control or NOTCH2 siRNAs. **D.** Migration and invasion assay in X01 GBM cells transfected with control or NOTCH2 siRNAs. **E.** Western blot analysis for CDH2, SNAI2 and ZEB1 in X01 GBM cells transfected with control or NOTCH2 siRNAs. **F, G.** qRT-PCR for NOTCH2, JAG1 and JAG2 in X01 GBM cells transfected with control siRNAs or siRNAs against STAT3 (F) or SRC (G). β -actin was used for a loading control. *, $P < 0.05$ versus control; **, $p < 0.01$ versus control.



Supplementary Figure S4: PKC δ is activated by c-MET in GBM. **A.** Western blot analysis for activation status of PKC δ in X01 GBM cells transfected with control or c-MET. **B.** Migration and invasion assay in X01 GBM cells transfected with control or c-MET siRNAs. **C.** Western blot analysis for activation status of SRC, STAT3 and NOTCH2 in X01 GBM cells transfected with control or c-MET siRNAs. **D.** Western blot analysis for CDH2, SNAI2 and ZEB1 in X01 GBM cells transfected with control or c-MET siRNAs. **E.** qRT-PCR for NOTCH-2, JAG1 and -2 in X01 GBM cells transfected by control or c-MET siRNAs. **F.** Western blot analysis for phosphorylation status of PKC δ and NOTCH2 levels after treatment with HGF. β -actin was used for a loading control. **, $p < 0.01$ versus control.



Supplementary Figure S5: Kaplan-Meier survival curves of human brain tumor patients expressing high and low levels of *PRKCA* A. and *PRKCB* B. in REMBRANDT database.