

Supplementary Information
for

The *PRKD1* promoter is a target of the KRas-NF- κ B pathway in pancreatic cancer

Heike Döppler¹, Richard Panayiotou¹, Elizabeth M. Reid¹, Willibroad Maimo¹, Ligia Bastea¹ and Peter Storz^{1,*}

¹ Department of Cancer Biology, Mayo Clinic Comprehensive Cancer Center, Mayo Clinic, Jacksonville, FL 32224, USA

* Corresponding author: Peter Storz, Mayo Clinic, Griffin Building, Room 306, 4500 San Pablo Road, Jacksonville, FL 32224. Tel: 904 953-6909, Fax: 904 953-0277, e-mail: storz.peter@mayo.edu

Figure S1, related to Figure 3

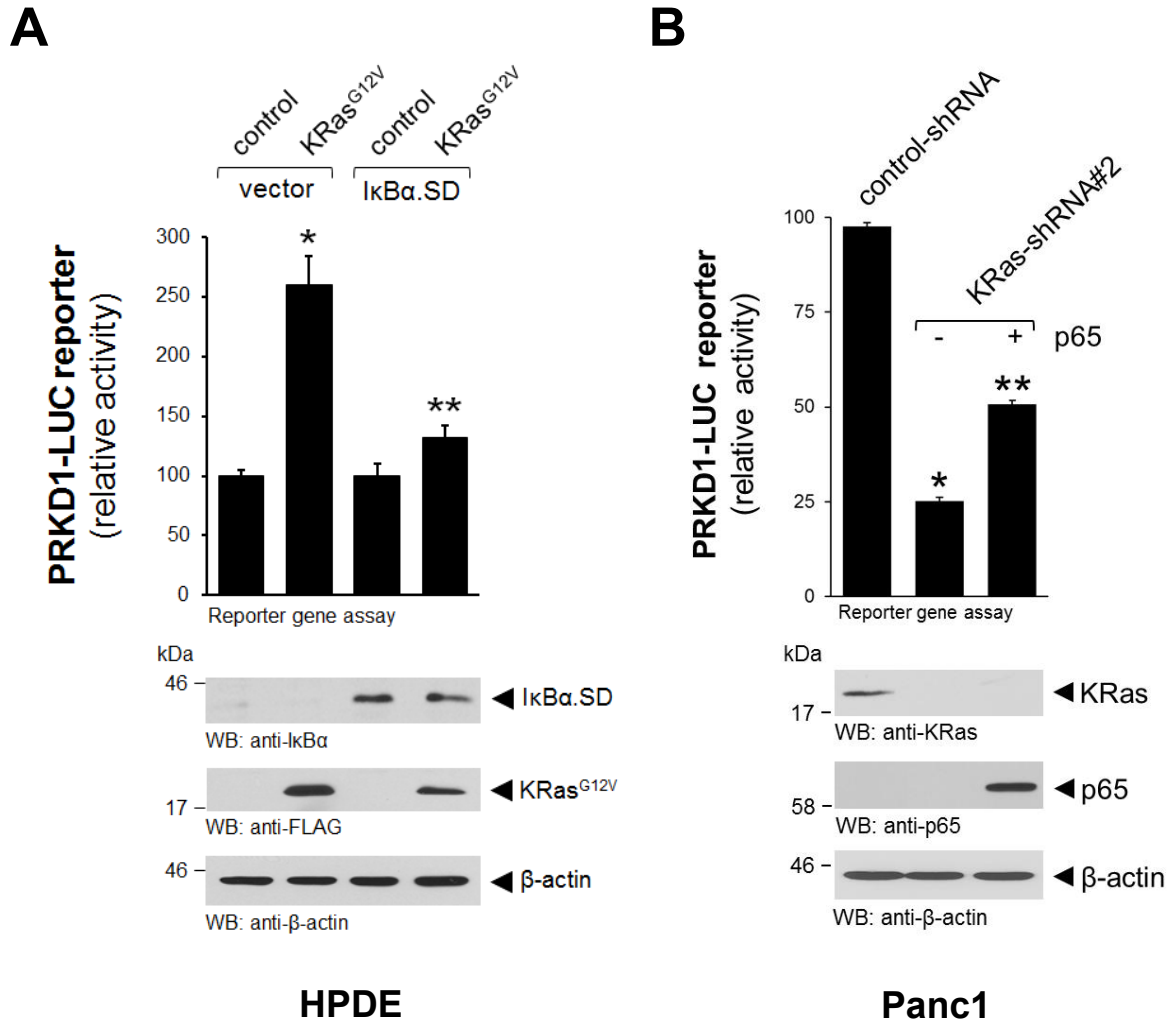
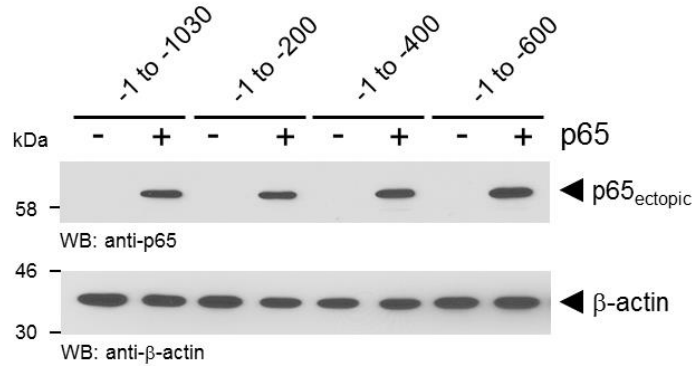


Figure S1, relates to Figure 3: **Oncogenic Kras induces *PRKD1* expression via the canonical NF- κ B pathway.** **A:** HPDE cells were co-transfected with vector control, I κ B α .SD or KRas^{G12V} and *PRKD1*-luciferase and renilla-luciferase reporters. 24 hours after transfection cells were lysed, and reporter gene assays performed. Probing lysates for I κ B α (anti-I κ B α), KRas^{G12V} (anti-FLAG) or β -actin (anti- β -actin) served as expression or loading controls. **B:** Panc1 cells were transfected with control-shRNA or shRNA targeting KRas, as well as vector control or p65 and *PRKD1*-luciferase and renilla-luciferase reporters, as indicated. 48 hours after transfection cells were lysed, and reporter gene assays performed. Probing lysates for KRas (anti-KRas), p65 (anti-p65) or β -actin (anti- β -actin) served as expression or loading controls.

Figure S2, related to Figure 4

A

Input controls:



B

CGGCGACTTACCTTCTGGTCGACAATGGAGCAAGCCATCTCGCGGACGTGCGCCAGGCTGTAGT
 CCCC GGACGAGTCCTGCAGCAGCAGCACC GGCTCACGGCTCAGGCCGATCTGCAGATGGAACGA
 GATGCCCCCGACCGGGGCCGACAGGAGCCAAGAACGGCGCGGGCCCGGGCCCGGACCCCTGGG
 ACCAGTGC GGCGGCCCTGCGGCAGCTGCCGCCACGGGCAGCAGCGACTGGGCGGCCGCA
 GGACCGGAGGGGCGCTCATCGCTCGGCGGGGCGCAGGGCCGGGCAGCGGAGGGCGGGGGCTGGC
 GCGCGGCAGCAGGAAAGTTTTGCAGCCGCTGAGCCAGGAGCTTCTTTCTCCGAGAGCCAGAC
 GGAAAATAAAAACTTTCCGGAAGTCCCTGGGCTGGGGGAGGGCAAGGGGATGAGGATCGGGA
 GGGGAGGGGACTAAGGGGAGGAGATGGGGAGGAGGGAAAATGGCCGAGGCGGGAGGACTCTGAG
 GCCCGGAACCGCGCAGCCGGCTCGGGGCCCGCGCACTGGGGAGGGCGCCGCCGCCCAAGAAT
 CTGCCGCTGGCGCGCTCGGAAGGACGGGGCGACGGGTGCGCGCGGCCCGAGCGCCGGCGGGG
 GCGGGGCGGGAAAGGGGCGTGAGGGGCGGGGAAGGGGAGCTGGGGCGGGCACTGGGGAGCCA
 CCACCCGGCGGGCGGGAGTCGCAGGAGCAGCGGCCGCACTGGCCGAGGGTGCCCGGTGCGC
 GCCCCCTCCGCCCGCAGTTCCCGGGGCTGAGCCTCCGCGAGCCGGGATAGGACCGAGTGCCGG
 GGCTCGGAGCCGCTCGGCAGGCGCGGCCCTTCCCTCCCTGCAGGGATTCCCGTCTCTCGGGT
 CCCGCTGCCCGCCCCGACTGCGGACGGAGTGGATGGGGTGACCGCCTCAGACCCGCTTCCCTG
 GGGTCGCGAACTTCCCGGGCCCCAAGGTCCCTGCCACCTCTTCCAAATGCTGGAGGACTACGCA
 CTTCTAC

Figure S2, relates to Figure 4: **Mapping of the NF- κ B site in the *PRKD1* promoter region -1 to -1030.** **A:** Control blots (input control) for Fig. 4A. Cell lysates were analyzed by Western blot for overexpression of p65 (anti-p65), as well as for β -actin (anti- β -actin; loading control). **B:** Nucleotide sequence of the *PRKD1* promoter (-1 to -1030) fused to a luciferase reporter. Blue labeling indicates the fragment identified in Fig. 4A as relevant for p65-mediated activation of the *PRKD1* promoter. The potential reverse oriented NF- κ B binding site within this fragment is indicated in red.