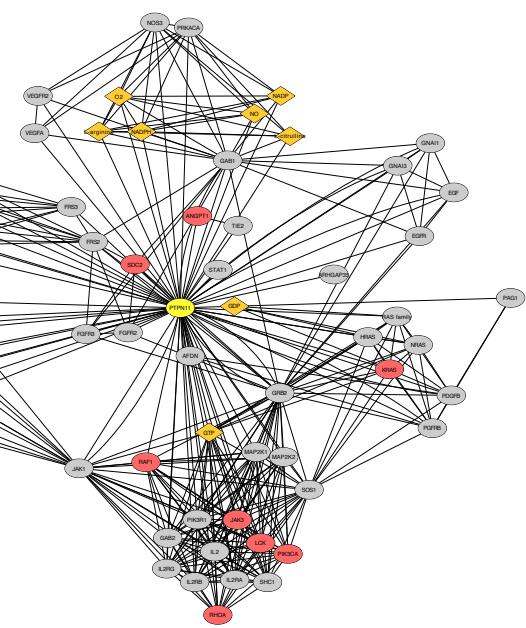
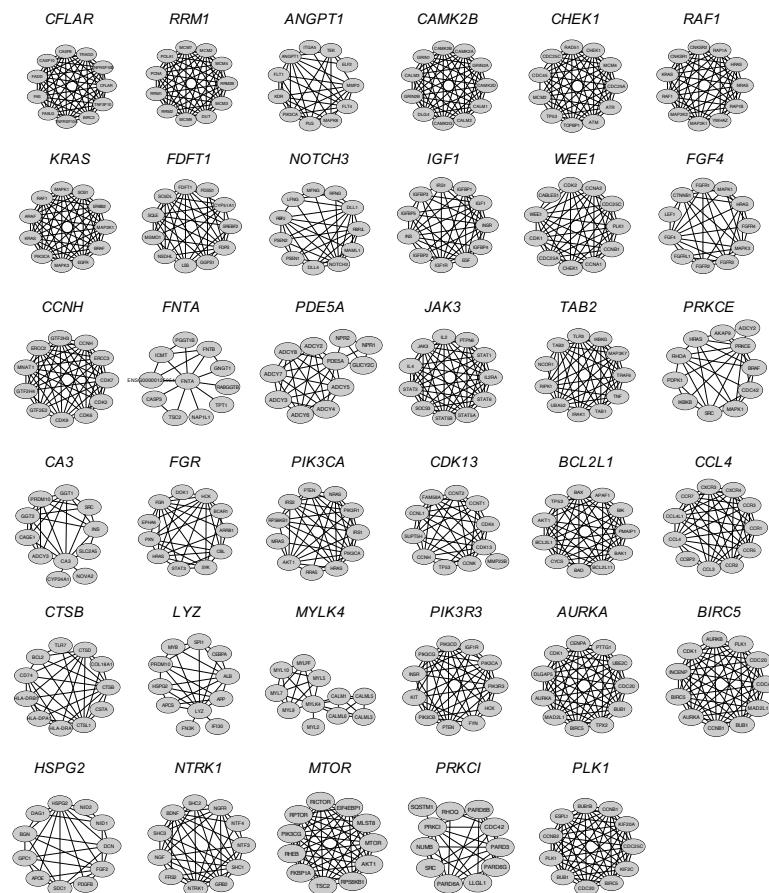


A

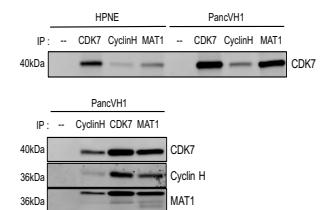
PID_SHP2_PATHWAY			
ANGPT1	IGF1	KRAS	PDGFB
ARHGAP35	IGF1R	LCK	PDGFRB
BDNF	IL2	LMO4	PIK3CA
EGF	IL2RA	MAP2K1	PIK3R1
EGFR	IL2RB	MAP2K2	PRKACA
FRS2	IL2RG	MLLT4	PTPN11
FRS3	IL6	NGF	RAF1
GAB1	IL6R	NOS3	RHOA
GAB2	IL6ST	NRAS	SDC2
GNAI1	IRS1	NTF3	SHC1
GNAI3	JAK1	NTF4	SOS1
GRB2	JAK2	NTRK1	STAT1
HRAS	JAK3	NTRK2	TEK
IFNG	KDR	NTRK3	VEGFA
IFNGR1	PAG1		



B



C



D

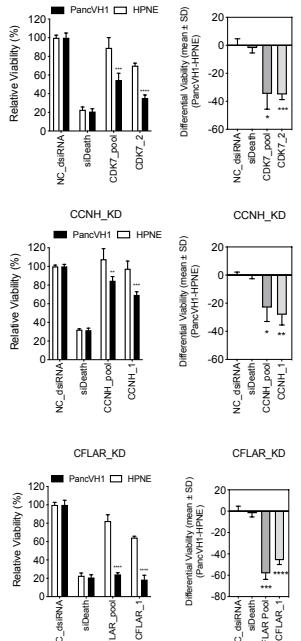


Figure S3. Extended Data. A. Left: Pathway Interaction DataBase (PID) PTPN11/SHP2 Pathway Genes. Right: PTPN11/SHP2 Pathway Network with PancVH1 RNAi hits in red and PancVH1 somatic variants in yellow. KRAS is both a somatic variant (G12V) and RNAi hit (red). **B.** 35 druggable signaling nodes nominated by functional approach on KRAS TP53 mutant PancVH1; compilation of PancVH1 pancreatic pathway control hits (< KRAS median) (Fig.1D), druggable RNAi targets from RNAi secondary screen (SI Dataset S3), PancVH1 rank differentials with HPNE (Fig.1F) annotated by functional data cross reference to KRAS mutant JHU PDAC cell line RNAi extended kinase screens - custom designed pancreatic oncolibrary, DNA damage and response library (DDR), and a human kinome library (Fig.S2D); druggable signaling nodes displayed as STRING: functional protein association networks (<https://string-db.org/>) with default settings. **C.** CAK complex in PancVH1 and HPNE. Immunoprecipitation of Cyclin H, MAT1, CDK7 and immunoblotting of each subunit of the complex. **D.** Bar graphs of relative viability of dsRNA pooled and individual knockdowns of CDK7, Cyclin H (CCNH), and CFLAR in PancVH1 and HPNE; negative control dsRNA (NC_dsiRNA); positive control AllStars siDeath (siDeath); 120hr assay, dsRNA targeted knockdowns were statistically significant versus negative control dsRNA (left), and differential viabilities statistically significant between PancVH1 and HPNE (right); unpaired t-test; ****P<0.0001, ***P<0.001, **P<0.01, *P<0.05.