

Supplementary Table and Figures

Supplementary Table 1. Analysis of human HCC tumor samples for H-Ras expression and KLF6 alternative splicing. Columns are as designated: 1) tumor code, 2) relative H-Ras expression (primer 3-4) corrected to GAPDH, 3) relative H-Ras expression (primer 4-5) corrected to GAPDH, 4) relative H-Ras expression (primer 5-6) corrected to GAPDH, 5) mean of relative H-Ras expression corrected to GAPDH, 6) designation of high “h” H-Ras expression, 7) tumor code, 8) relative KLF6Full expression corrected to GAPDH, 9) relative KLF6 SV1 expression corrected to GAPDH, 10) ratio of KLF6Full to SV1 expression, 11) designation of high “h” KLF6 alternative splicing.

Supplementary Figure 1. Schematic of KLF6Full and its Splice Variants, SV1, SV2, & SV3. Top) Boxes represent exons. Lines represent introns. Splice donor sites are in capitalized bold. Bottom) KLF6Full and its 3 major splice variants²⁵. Both splice variants 1 & 3 create short, novel out-of-frame peptide sequences at the 3' ends of the transcripts, which are depicted with a different fill pattern. The native exons 3 & 4 are no longer translated in the same frame for splice variants 1 and 3, respectively.

Supplementary Figure 2. A-B) One μg of a pCIneo empty vector or pCIneo-H-Ras^{R12} construct was transiently transfected into 293T, BPH1, and PC3M cells using Lipofectatime 2000. Cells were plated at 50,000 cells per well in a 12-well plate, transfected for 24 hours, then harvested for mRNA and protein. C) One μg of pcDNA3.1-

LacZ control vector or pcDNA3.1-K-Ras^{V12} was transiently transfected into BPH1 and PC3M cells, and harvested as described in Fig 1C.

Supplementary Figure 3. A) mRNA from HCT116 cells and the two daughter cell lines, Hkh-2 and Hke-3, were analyzed by qRT-PCR. B) HCT116, Hke-2, DLD-1, Dko-4, and Dks-8 cells were plated at sub-confluent densities then harvested for protein. C) Hkh-2 cells were plated at 25,000 cells per well, then transiently co-transfected with 1 µg of pcDNA empty vector, pcDNA-K-Ras, or pcDNA-K-Ras^{V12} overexpression vectors, and 1 µg of pSuper-Luc control vector, pSuper-K-Ras, or pSuper-K-Ras^{V12} siRNA vectors (combinations as shown in figure). Cells were transfected for 48 hours, then harvested for mRNA.

Supplementary Figure 4. A-B) HepG2 and PC3M cells were plated at 25,000 cells per well and treated with DMSO vehicle control or 100 µM FTS for 3 days. C-D) The same Hep3B cells from Fig 3D (treated with FTS or control) were harvested for mRNA at day 2 for qPCR analysis. Proliferation assays were performed at daily intervals.

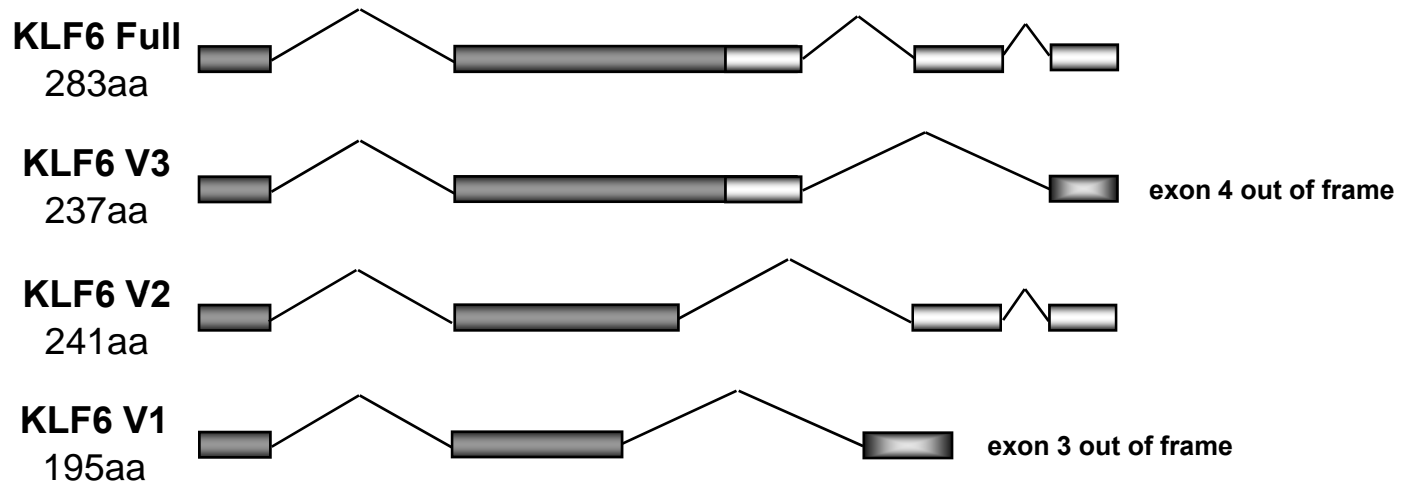
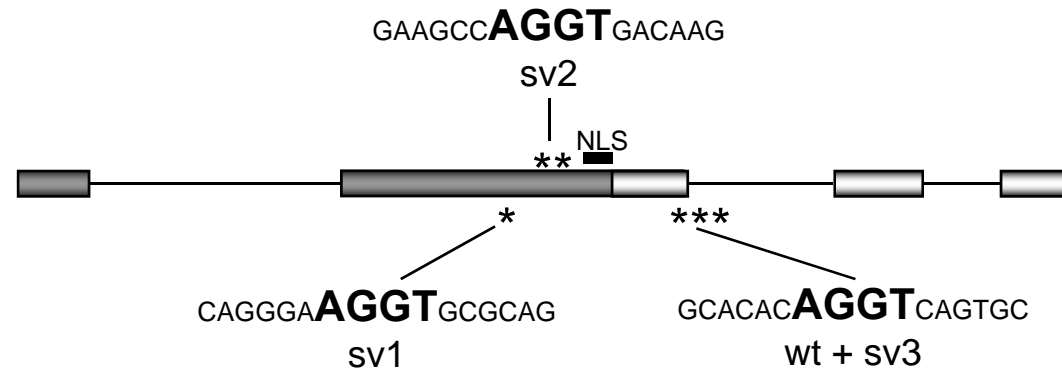
Supplementary Figure 5. A) PC3M cells were transfected with 1 µg of empty vector or a dominant-negative PI3-K vector for 24 hours at various sub-confluent densities, then harvested for mRNA and protein. B) HepG2 cells were plated at 50,000 cells per well, treated with 10 µM LY294002 for 24 hours, then harvested for protein. C) Huh7 cells were plated at 50,000 cells per well, transfected with 5 nM control siRNA, ASF/SF2 siRNA, or 9G8 siRNA for 48 hours, then harvested for protein. D) Huh7 cells were

transfected with 1 μ g of ASF/SF2 or control plasmid for 24 hours, then analyzed for protein. E-F) Over-expression confirmation of H-Ras, K-Ras, & DN-PI3K constructs in cell lines by qRT-PCR.

Supplementary Table 1

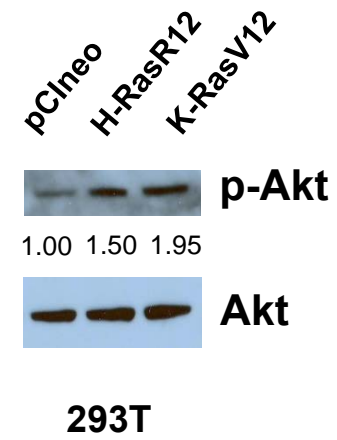
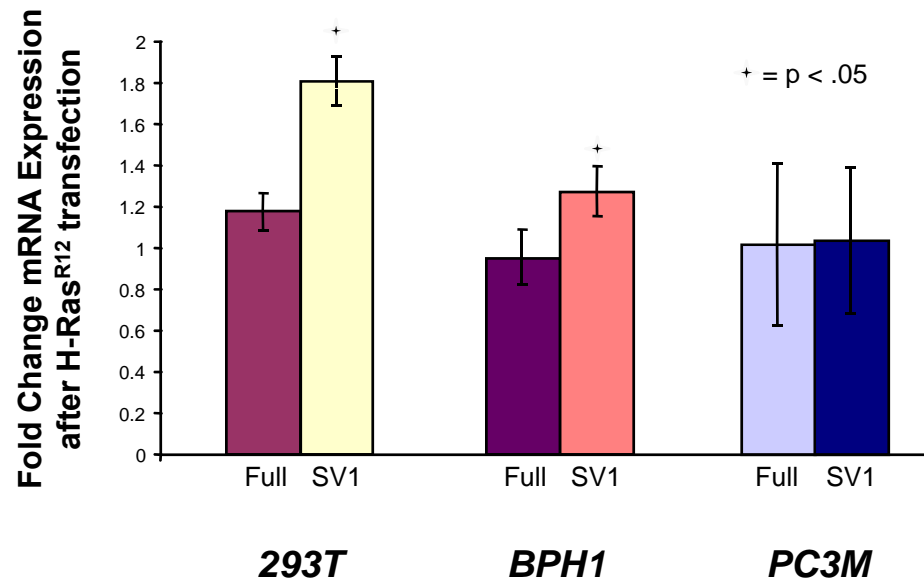
	Gapdh-(3-4)	Gapdh-(4-5)	Gapdh-(5-6)		A WT	A V1X	A V1X/WT	
ny18-adv	2.411615655	2.329467173	1.681792831	2.140958553	A NY18	3.675787929	4.840966197	9.486373049 h
ny34-adv	1.945309895	2.496661098	2.158456473	2.200142489	A NY34	1	1.967136795	12.2361069 h
ny36-adv	1	1	1	1	A NY36	2.114679692	6.544379323	21.81846571 h
m25-adv	3.784230587	11.63178014	7.944739963	7.786916896 h	A M25	4.469805024	6.53286536	8.14641172 h
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m59-adv	2.657371628	4.723970646	8.456144324	5.279162199 h	A M59	6.587807495	5.370351842	4.743217543 h
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m27-adv	77.17170097	77.17170097	20.82146969	58.38829054 h	A-M27	9.766004525	4.627446492	2.486729288
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b11-adv	2.25558E-07	2.27126E-07	1.55132E-07	2.02605E-07	A-B11	41.40619479	34.02571228	5.69788631 h
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ny311-vadv	45.56960634	11.3137085	86.82267699	47.90199728 h	AA-NY311	3.549196321	739.7751462	854.4958724 h
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ny79-vadv	7.727490628	8.111675749	18.12614212	11.3217695 h	AA-NY79	2.136312026	2.782004468	13.82106712 h

**Supplementary
Figure 1**

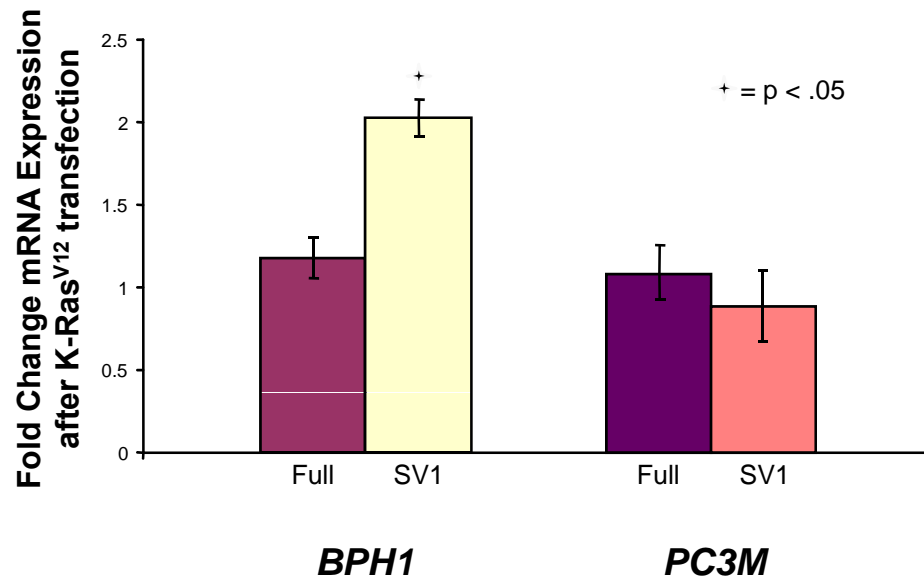


Supplementary Figure 2a

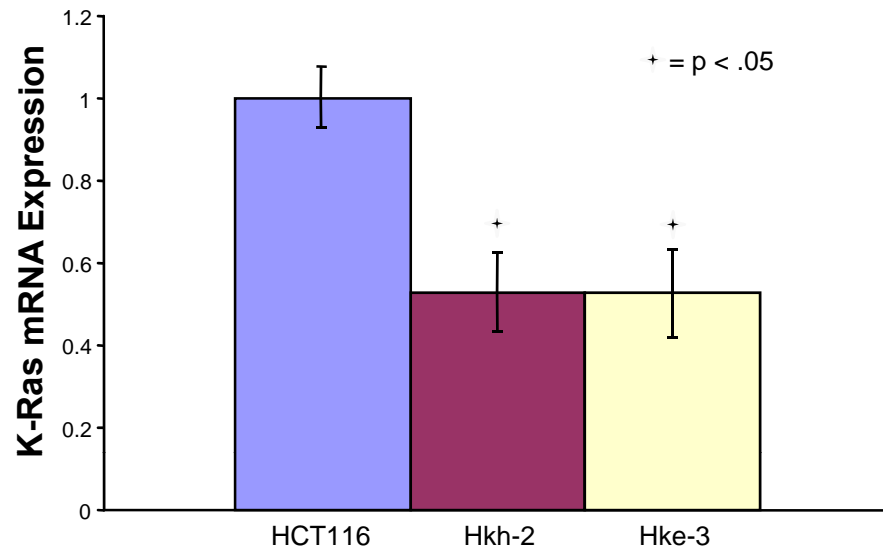
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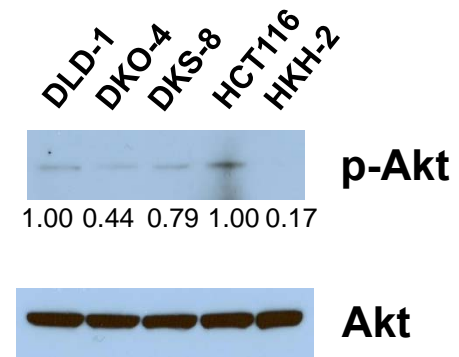
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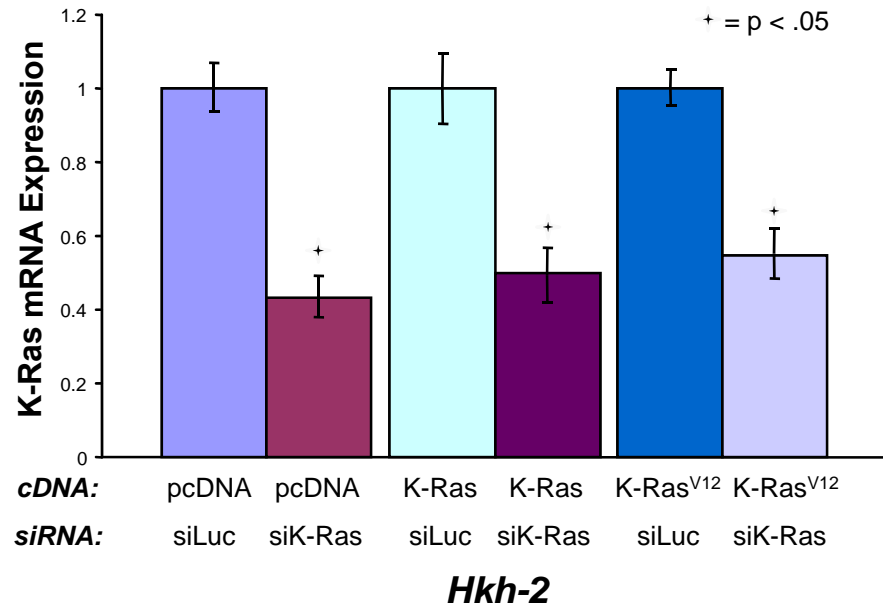
Supplementary Figure 3a



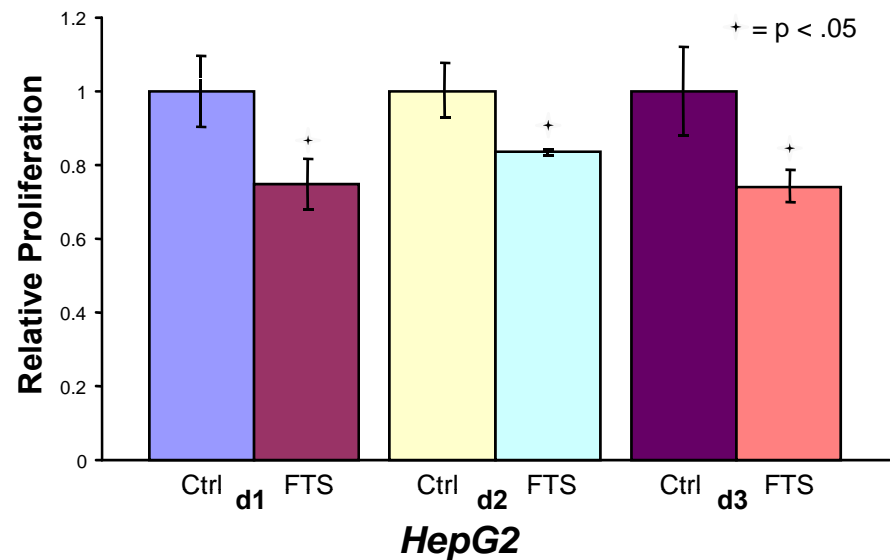
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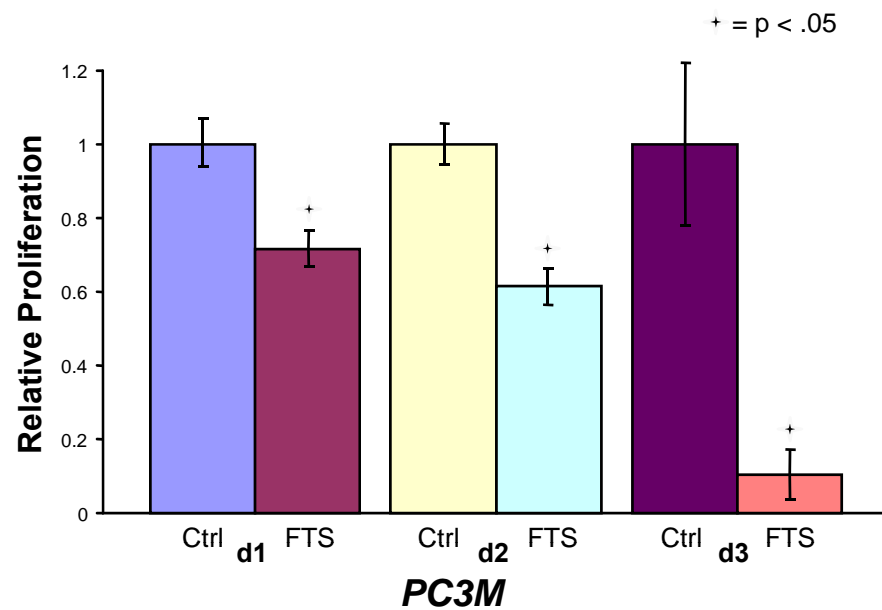
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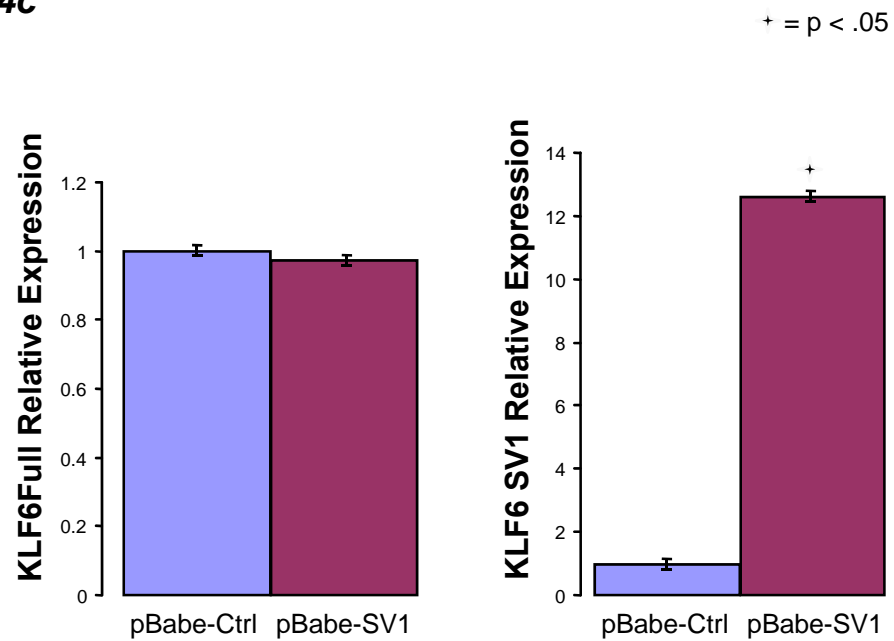
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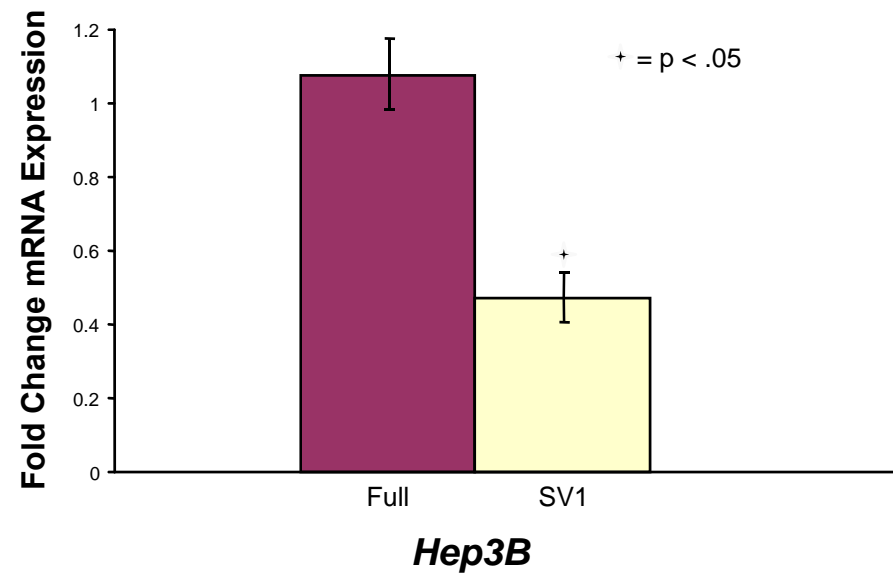
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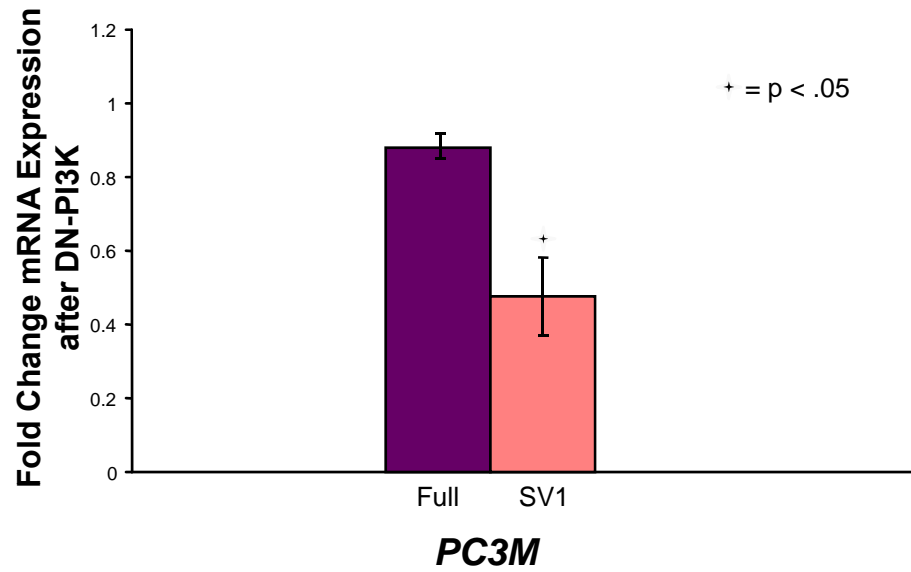
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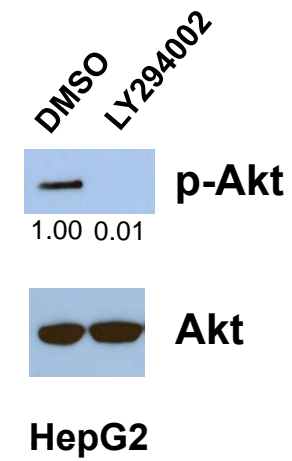
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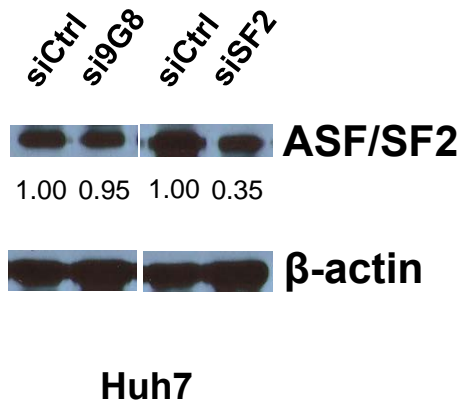
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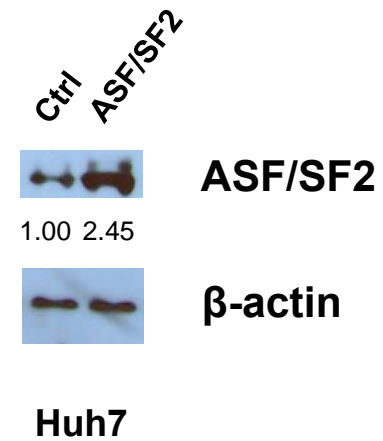
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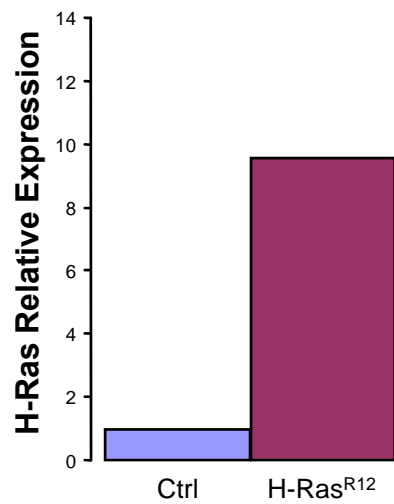
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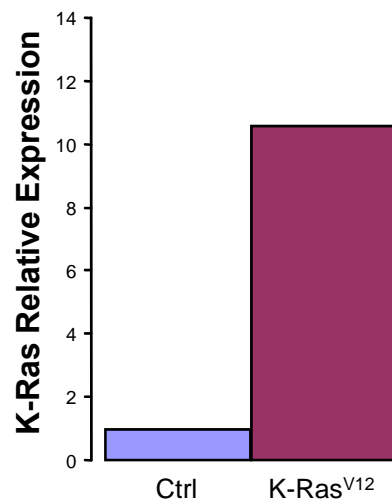
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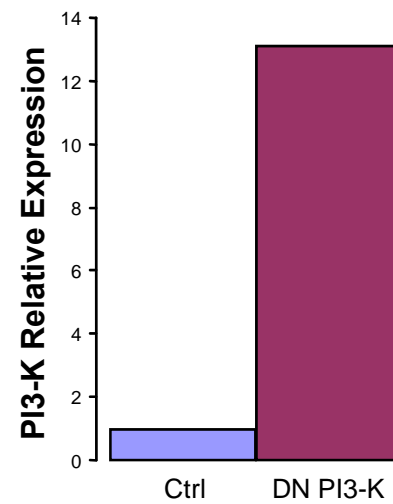
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PC3M

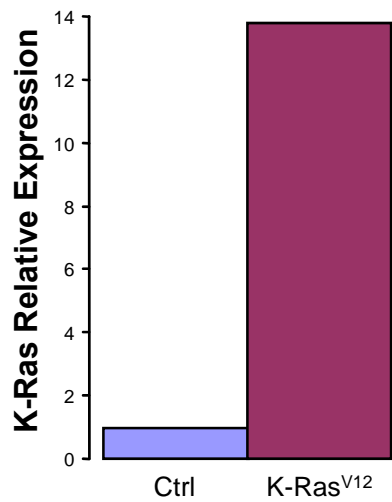


PC3M



PC3M

5f



293T