

Supplementary Information

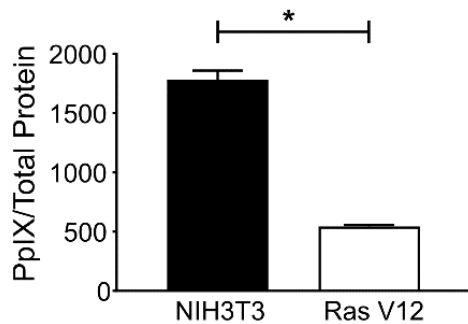
MEK reduces cancer-specific PpIX accumulation through the RSK-ABCB1 and HIF-1 α -FECH axes

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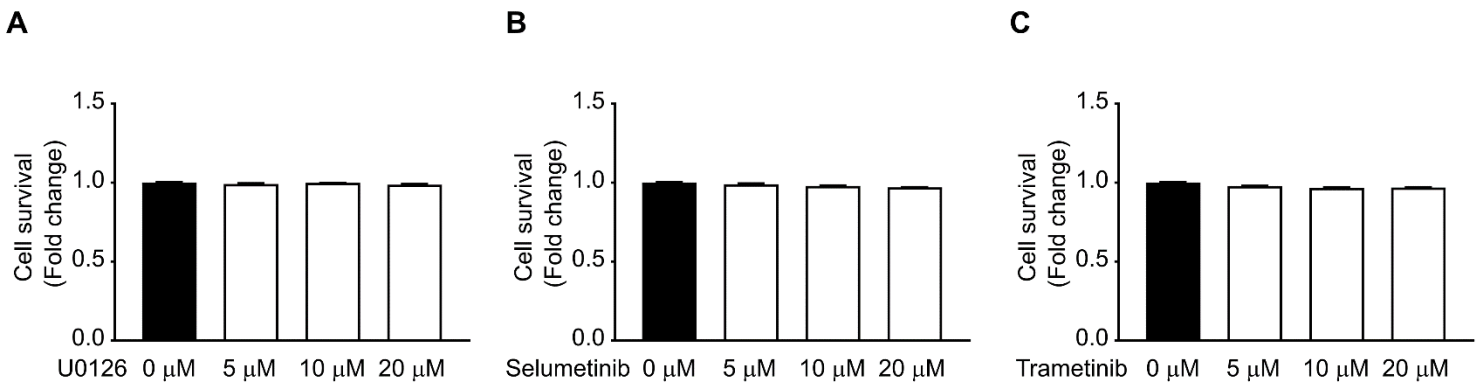
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Running title: RSK and HIF-1 α activation reduces PpIX accumulation

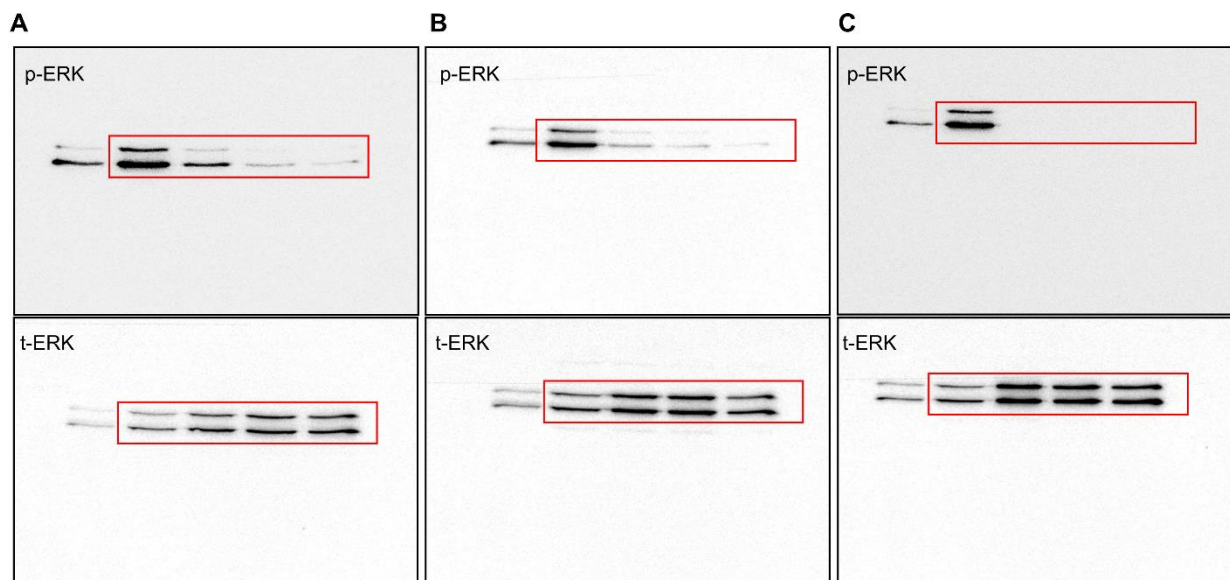
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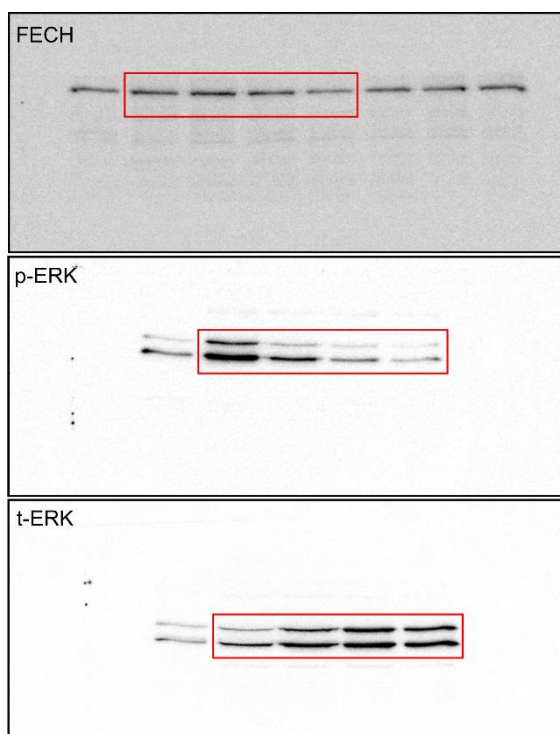
Supplementary Figure S1. NIH3T3 and Ras V12 cells were treated with 5 mM 5-ALA for 4 h, and the PpIX fluorescence in the cell lysates was measured using a fluorescence plate reader (BioTek Instruments Inc. VT) with a 405 nm excitation/630 nm emission filter. The total protein in the lysate was measured using a BCA protein assay kit (Thermo Scientific). PpIX fluorescence was then normalised to the total protein. The plot shows the mean \pm SD normalised PpIX fluorescence from 3 independent experiments. * $p < 0.01$ by Student's *t*-test.



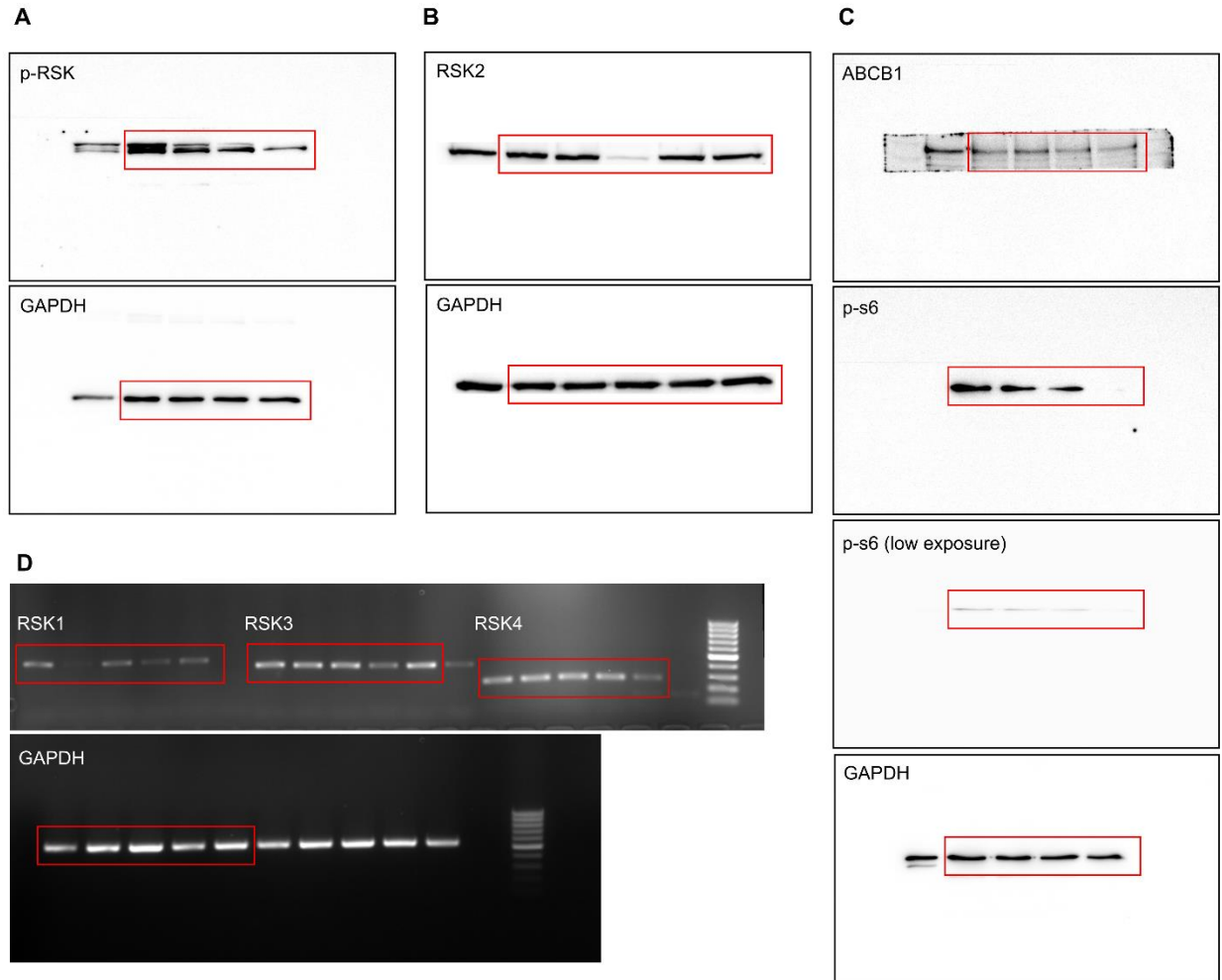
Supplementary Figure S2. RasV12 cells were treated with different concentrations of (A) U0126, (B) Selumetinib, or (C) Trametinib for 24 h. The cell viability was measured using the Colorimetric Cell Viability Kit I (WST-8) (PromoCell GmbH, Germany), following the manufacturer's instructions. The plots show the mean \pm SD fold change in cell survival.



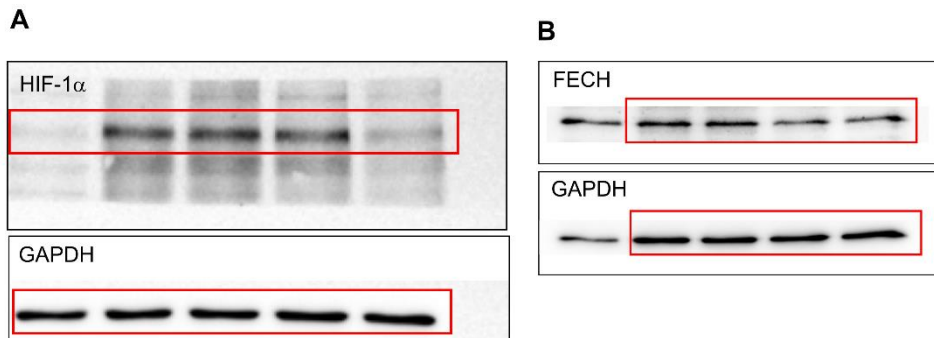
Supplementary Fig S3. Uncropped immunoblot for Fig 2A (A), 2B (B), and 2C (C).



Supplementary Fig S4. Uncropped immunoblot for Fig 4D.



Supplementary Fig S5. Uncropped immunoblots for Fig 5A (A), 5B (B), and 5E (C), and uncropped gel image for Fig 5B (D). The RSK2 and ABCB1 blots were cut before imaging to avoid interference from bright non-specific bands.



Supplementary Fig S6. Uncropped immunoblot for Fig 6A (A) and 6B (B). The FECH blot was cut before imaging to avoid interference from bright non-specific bands.