

Supplemental Materials

Molecular Biology of the Cell

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Supplementary Materials

Table S1. Differential expression of genes associated with cell-cell adhesion, EMT and Wnt signaling and all differentially expressed genes with their associated log2 fold change values.

Figure S1

CTNND1 Taqman probe	CTNND1 exon boundary	p120-catenin isoforms
HS000931672_m1	Exon 1-2a	1ABC, 1AB, 1A, 1AC, 1B, 2A
HS00931681_m1	Exon 1-2b	1A 2A
HS00931673_m1	Exon 2-3	1ABC, 1AB, 1A, 1AC, 1B
HS00609741_m1	Exon 3-4	1ABC, 1AB, 1A, 1AC, 1B, 2ABC, 2AC, 2AB, 2B, 2A
HS00609742_m1	Exon 4-5	1ABC, 1AB, 1A, 1AC, 1B, 2ABC, 2AC, 2AB, 2B, 2A 3ABC, 3AB, 3B, 3AC, 3A
HS00931670_m1	Exon 16-17	1ABC, 1AB, 1A, 1AC, 1B, 2ABC, 2AC, 2AB, 2B, 2A 3ABC, 3AB, 3B, 3AC, 3A
HS00931671_m1	Exon14-15	1B, 2B, 3B

Figure S1. (related to Figure 2) qRT-PCR analysis of p120-catenin isoform expression using isoform specific probes. Taqman probes are listed with corresponding spanned exon boundaries and corresponding p120-catenin isoforms. Probes spanning exons 1-2, 2-3 and 3-4 do not detect expression of isoform 3A.

Figure S2

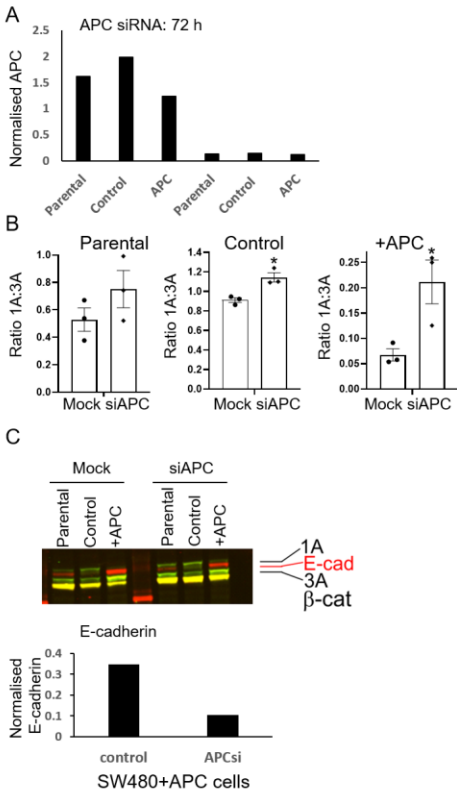


Figure S2. (related to Figure 3) **p120-catenin isoform expression is dependent on APC.** (A) Downregulation of APC by siRNA. SW480 parental, SW480 control and SW480+APC cells were incubated with siRNAs targeting APC for 72 h. Graph shows quantitation of normalized truncated APC protein from the APC immunoblot shown in Figure 3A. (B) The 1A:3A ratio of the p120-catenin isoform is increased in APCsi transfected cells. Graph shows normalized p120-catenin isoforms plotted as a ratio of 1A:3A for mock and APCsi-transfected cells at 72 h, mean \pm SEM from 3 independent experiments, * $P < 0.02$, unpaired one-tailed Student's *t* test. The ratio of p120-catenin 1A:3A is increased by 1.41, 1.26 and 3.16-fold for parental, control and +APC cells, respectively. (C) Downregulation of APC by siRNA results in reduced E-cadherin (red). Immunoblot from Figure 3B was probed with antibodies to E-cadherin (red) with normalized E-cadherin quantified below. E-cadherin levels were reduced by 2.6- and 3.4- fold at 72 h.

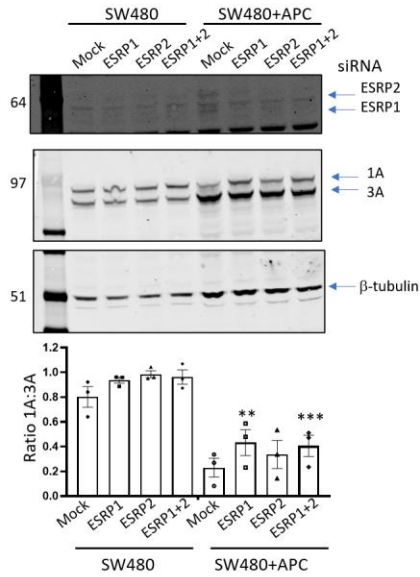


Figure S3. (related to Figure 4) **ESRP depletion results in increased levels of the p120-catenin isoform 1A in SW480+APC cells.** Depletion of ESRP1 and ESRP1+2 results in increased p120-catenin isoform 1A in SW480+APC cells. SW480 and SW480+APC cells were transfected with siRNAs targeting ESRP1, ESRP2 and ESRP1+2 and harvested after 72 h. Immunoblots were probed with antibodies to ESRP1/2, p120-catenin and β -tubulin. Quantitation of the 1A:3A ratio of p120-catenin isoform is shown in the graph below. Shown are the mean \pm SEM, n=3, **P<0.01, ***P<0.005, one-tail paired Student's *t* test.

Figure S4

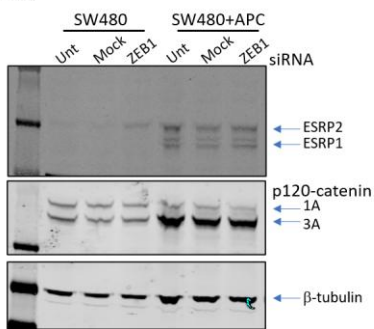


Figure S4. (related to Figure 4) **ZEB1 depletion results in increased ESRP2 but not ESRP1 expression in SW480 cells.** Cells were transfected with siRNAs targeting *ZEB1* and harvested after 72 h. Immunoblots were probed with antibodies to ESRP1/2, p120-catenin and β -tubulin.

Figure S5.

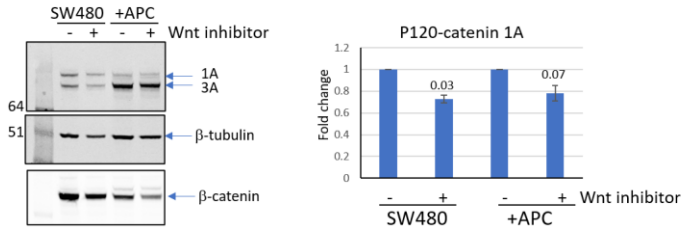


Figure S5. (related to Figure 6) **Distribution of p120-catenin isoforms in SW480 and SW480+APC cells following Wnt inhibition.** Cells were treated with either vehicle control or Wnt inhibitor pyrvinium pamoate (1 μ M, 18 h) and harvested for analysis by SDS-PAGE. Immunoblots were probed with antibodies to p120-catenin, β -tubulin and β -catenin. The fold change in p120-catenin isoform 1A compared to untreated is shown in the graph (mean \pm SEM, n=3, P values are shown on the graph, paired Student's *t*-test for Wnt inhibitor compared to vehicle control treated cells).