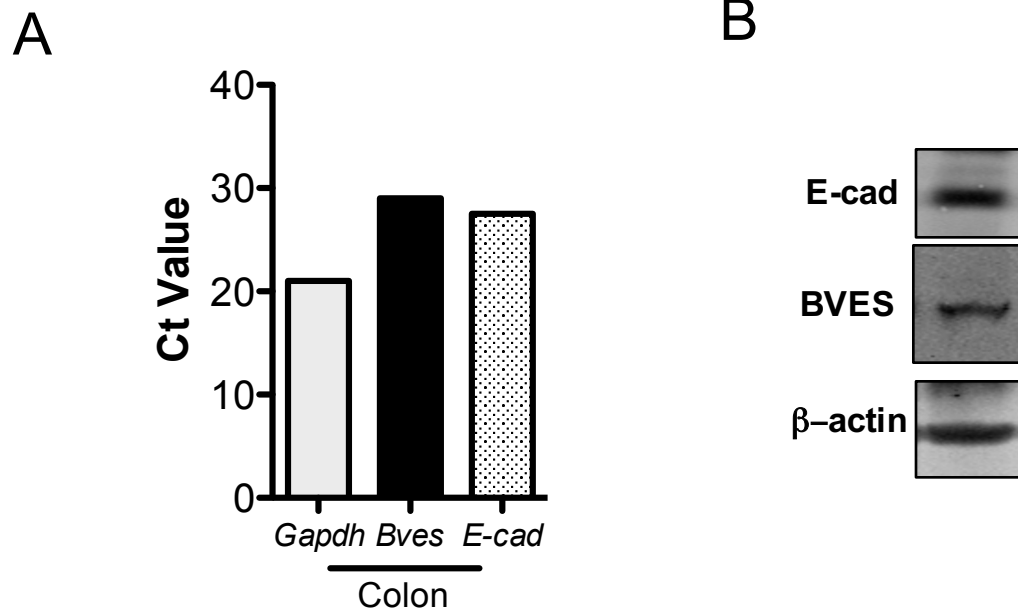
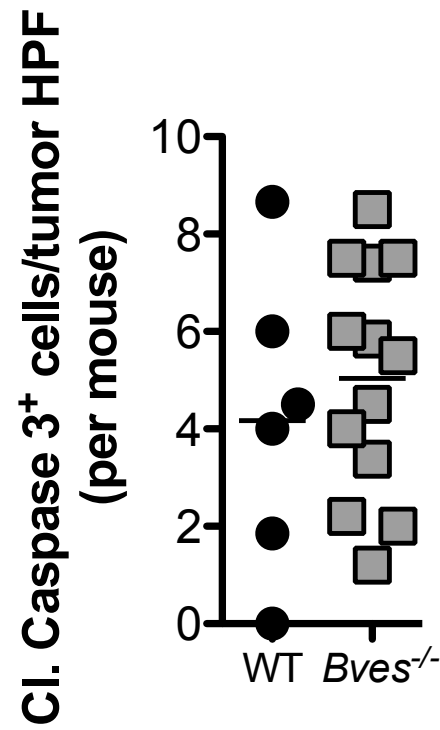


## Supplementary Figures 1-8 and Supplementary Tables 1-2

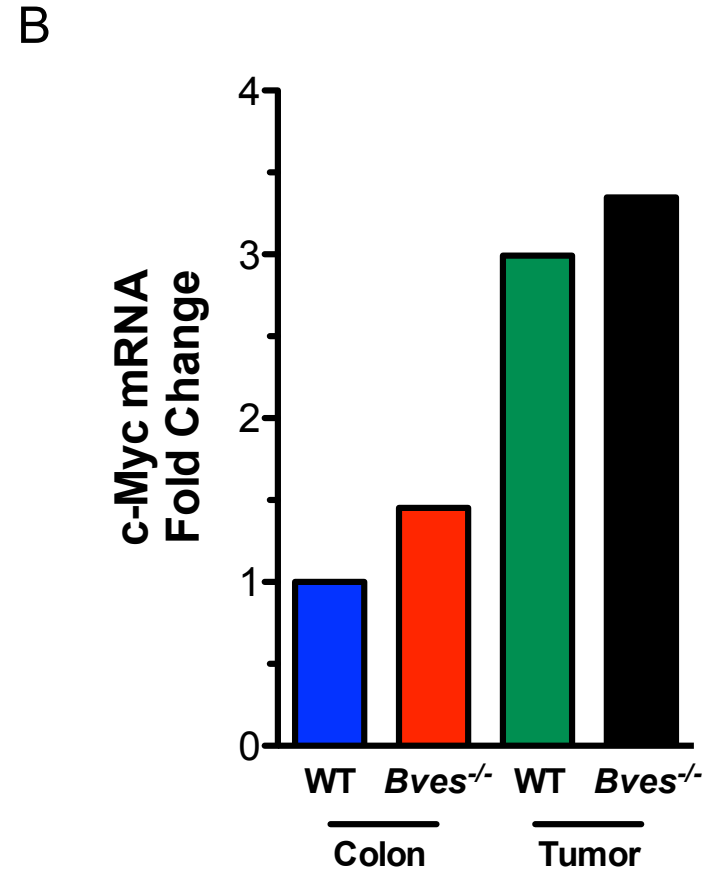
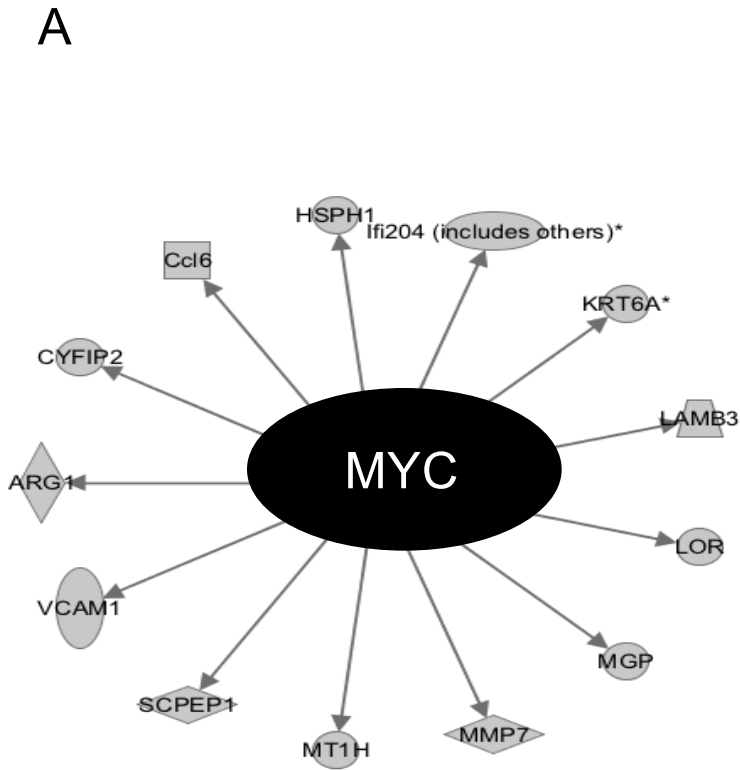


**Supplementary Figure 1 A)** *Ct* values of *Gapdh*, *Bves*, and *E-cadherin* mRNA levels in WT mouse colons. **B)** Immunoblot of E-cadherin, BVES and  $\beta$ -actin in mouse colons.



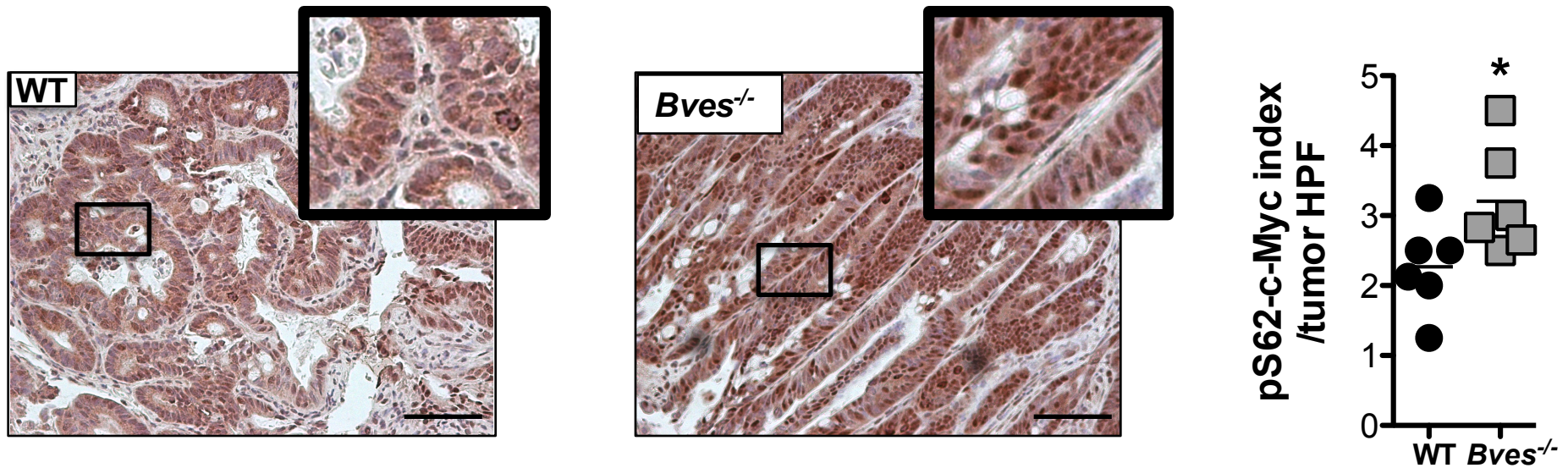
## Supplementary Figure 2

Quantification of cleaved caspase 3 positive cells per tumor high-powered field.



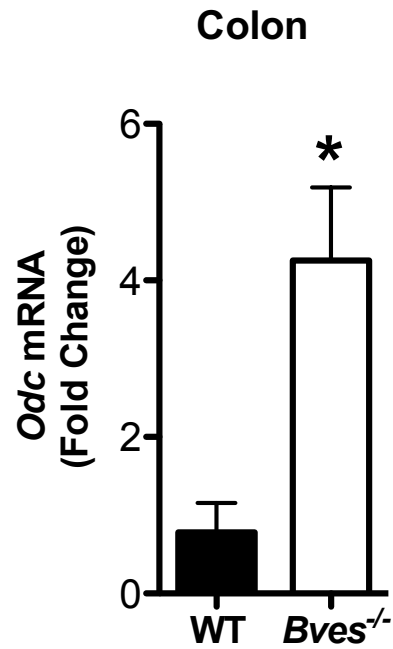
### Supplementary Figure 3

(A) IPA generated schematic of dysregulated c-Myc network in *Bves*<sup>-/-</sup> tumors compared to WT tumors. (B) c-Myc mRNA levels relative to WT colon.



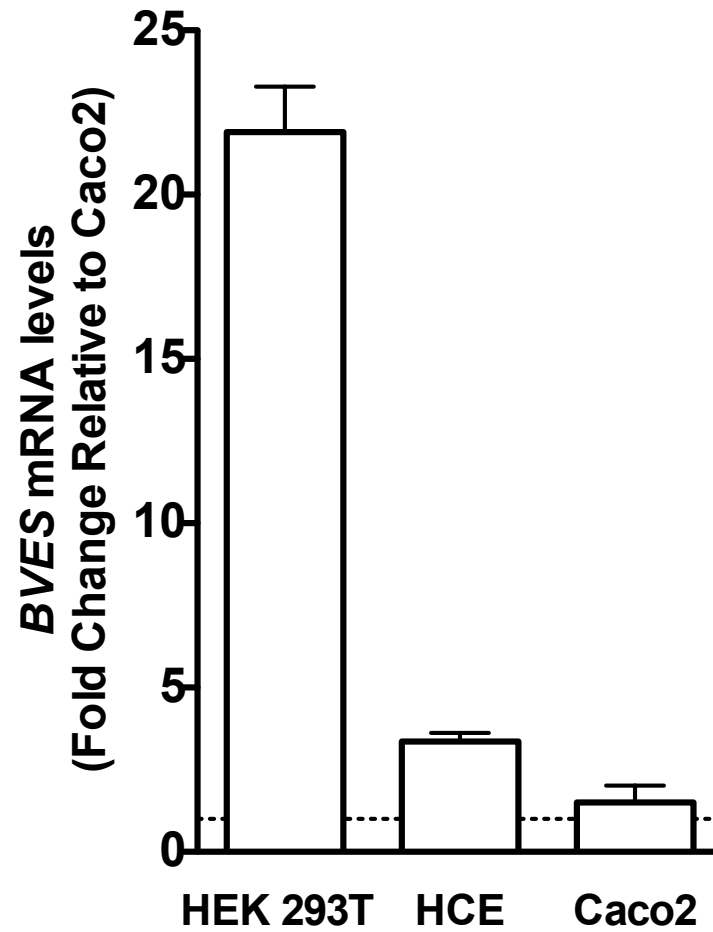
### Supplementary Figure 4

Left: Representative images of immunohistochemistry for intratumoral phosphorylated serine 62 c-Myc staining. Right: Quantification of pS62 c-Myc positive cells per tumor high power field. High power fields were scored according to an index from 1-5 (a score of 1 denotes less than 20% of positive cells per high power field; a score of 2 denotes 20-40%; a score of 3 denotes 40-60%; a score of 4 denotes 60-80%; a score of 5 denotes 80-100%). Each dot represents the average score of each mouse per tumor HPF. A minimum of 5 HPF were scored per mouse. Student's t test, \* $p < 0.05$ . Size standard=50 microns.



**Supplementary Figure 5**

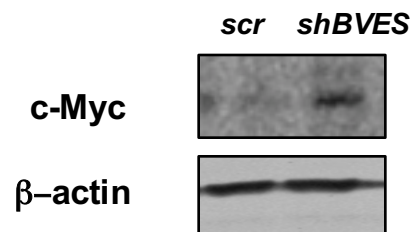
qPCR for c-Myc transcriptional target *Odc* in colons of WT and *Bves*<sup>-/-</sup> mice at baseline. \*p<0.05



### Supplementary Figure 6

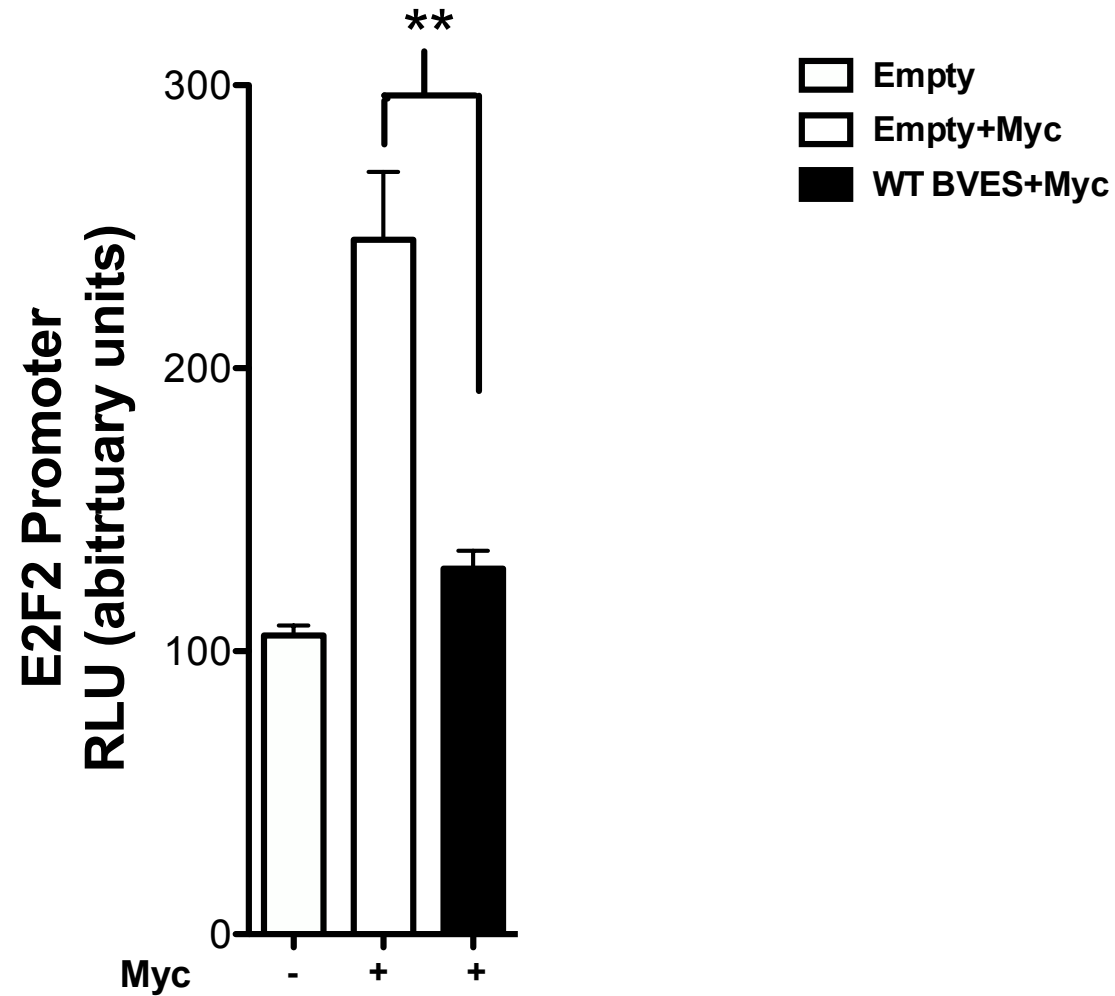
qPCR of *BVES* mRNA in three human cell lines: HEK 293T, Human Corneal Epithelial (HCE), and Caco2.

## Human Corneal Epithelial cells



### **Supplementary Figure 7**

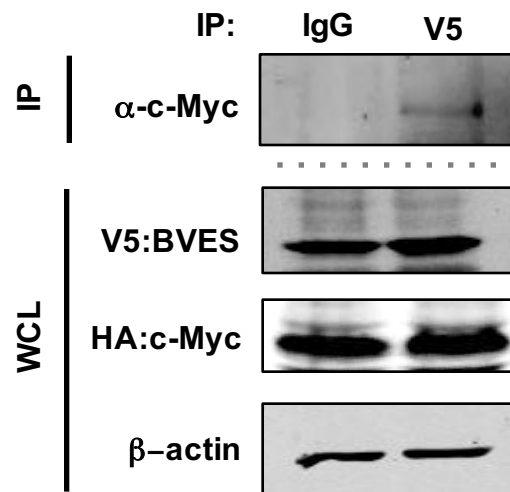
Immunoblot of c-Myc after knockdown of *BVES* in the Human Corneal Epithelial (HCE) cell line using shRNAs.



### Supplementary Figure 8

Relative luciferase values of HEK 293T cells co-transfected with an E2F2 reporter and an empty vector, HA-c-Myc and/or V5-BVES. Experiment was performed in technical triplicates and replicated twice. \*\*p<0.01





### Supplementary Figure 9

HEK 293T cells were transfected with HA:c-Myc and V5:BVES. V5:BVES was immunoprecipitated followed by immunoblotting for HA:c-Myc. Non-specific IgG was used as a control.

## Supplementary Table 1

Patient	Biopsy dx	UC NP/P	biopsy dx	Location	Distance to Dysplasia(f/anal verge)	Age	Gender	Disease Duration( mo.)	PSC?	Disease Activity	Inflammation
1	neg	NP	neg	distal		67	M	30	no		3-4+
2	neg	NP	neg	distal		70	F	16	no		3-4+
3	tumor	P	tumor	distal	0 cm	55	F	20	no		4+
4	neg	NP	neg	distal		56	F	10	no		
5	tumor	P	tumor	proximal	0 cm	47	M	8	no		?
6	tumor	P	tumor	proximal	0 cm	31	M	10	no		?
7	neg	NP	neg	distal		48	M	9	no		3-4+
8	neg	P	neg	distal		67	M	30	no		0
9	neg	NP	neg	distal		41	F	20	no		2-3+
10	neg	NP	neg	distal		63	M	39	no		
11	neg	NP	neg	distal		31	M	8	no		3-4+
12	neg	NP	neg	distal		49	F	20	no		1-2+
13	HGD	P	HGD	83 cm	0 cm	36	M	8	yes	marked activity	4+
14	HGD	P	HGD	(C2)next to rectal pieces	0 cm	53	F	NA	no?		4+
15	neg	NP	neg	7 cm		59	M	0.25		no data	active
16	neg	NP	neg	14 cm		51	F	20	no	no data	3+
17	neg	NP	neg	15 cm		46	F	17	no	no data	0
18	neg	P	neg	3.4 cm	78.3 cm	36	M	11	yes	no data	0
19	HGD	P	HGD	92 cm	0 cm	58	M	29	yes	focal activity	0
20	HGD	P	HGD	3 cm	0 cm	32	M	16	no	active	1+
21	HGD	P	LGD+HGD	19 cm	0 cm	48	M	10	no	focal activity	0
22	HGD	P	HGD	4 cm	0 cm	33	M	13	no	focal active	4+
23	HGD	P	HGD	70.4 cm	6.4cm to CA	51	F	13	yes	active	1+
24	HGD	P	HGD	31.2 cm	0 cm	33	F	22	no	no data	1+
25	neg	P	neg	14.4 cm	18.4 cm	34	M	17	yes	active	1+

## Supplementary Table 2

	<b>UC Patients With Cancer (N=14)</b>	<b>UC Patients with Dysplasia (N=5)</b>	<b>UC patients (N=13)</b>	<b>Normal (N=11)</b>
<b>Average Age (sd)</b>	51.4 + 18.3	53.2 + 15.5	55+ 10.2	60.9 + 11.5
<b>Gender</b>	6 Males, 8 Females	4 Males, 1 Female	8 Males, 5 Females	5 Males, 6 Females
<b>BMI</b>	26 + 9.2	n/a	n/a	26.6 + 3.1
<b>Race</b>	White (N=14)	n/a	n/a	Black (N=1), White (N=10)
<b>Tumor Grade</b>	Grade 1 (N=3), Grade 2 (N=2), Grade 3 (N=9)	n/a	n/a	n/a
<b>Location if known</b>	Descending (N=2), Transverse (N=2), Left (N=1), Ascending (N=1), Sigmoid (N=2), Rectum (N=4), Hepatic fixture (N=1)	n/a	n/a	n/a
<b>Lymph Node Involvement</b>	Positive (N=9), Negative (N=5)	n/a	n/a	n/a
<b>Average Tumor Size</b>	4.2 + 2.9 cm	n/a	n/a	n/a
<b>Mesenteric Deposits</b>	Absent (N=7), Present (N=8)	n/a	n/a	n/a