Supplemental Table 1: Statistical Analysis of GFP-Positive Cells Counting Data							
Figure Number	**AVC or Vent**	**Condition**	**N**	**Total Number of GFP-positive cells**	**Number of Epithelial Cells (%)**	**Number of Activated Cells (%)**	**Number of Transformed Cells (%)**
Figure 1F	Vent	GFP, 200pM TGFβ2, control siRNA	24	956	737 (77±1.4%)	111 (12±0.4%)	108 (11±0.9%)
	Vent	TGFβR3, TGFβ2, control siRNA	23	957	431 (45±2.0%)	107 (11±1.5%)	419 (44±0.6%)
	Vent	GFP, TGFβ2, Smad4A siRNA	24	960	753 (78±1.6%)	105 (11±1.0%)	102 (11±0.6%)
	Vent	GFP, TGFβ2, Smad4B siRNA	24	867	696 (80±0.8%)	83 (10±0.6%)	88 (10±0.4%)
	Vent	TGFβR3, TGFβ2, Smad4A siRNA	24	765	581 (76±1.3%)	90 (12±1.0%)	94 (12±1.2%)
	Vent	TGFβR3, TGFβ2, Smad4B siRNA	24	765	603 (79±1.4%)	83 (11±0.7%)	79 (11±1.3%)
Figure 1G	Vent	GFP, 5 nM BMP-2, control siRNA	23	763	609 (80±1.2%)	71 (9±0.4%)	83 (11±1.7%)
	Vent	TGFβR3, BMP-2, control siRNA	23	914	437 (48±0.7%)	89 (10±0.6%)	388 (42±0.3%)
	Vent	GFP, BMP-2, Smad4A siRNA	24	863	708 (82±1.6%)	72 (8±0.7%)	83 (10±1.1%)
	Vent	GFP, BMP-2,	24	846	690 (81±1.7%)	76 (9±1.1%)	80 (10±0.6%)

		Smad4B siRNA					
	Vent	TGFβR3, BMP-2, Smad4A siRNA	24	556	419 (75±2.3%)	65 (12±1.3%)	72 (13±1.8%)
	Vent	TGFβR3, BMP-2, Smad4B siRNA	24	514	404 (79±1.3%)	50 (10±1.5%)	60 (12±1.9%)
Figure 2C	Vent	GFP	39	1643	1096 (67±2.6%)	182 (11±1.4%)	365 (22±1.8%)
	Vent	Smad1	39	1292	755 (57±4.3%)	170 (14±1.3%)	367 (29±3.6%)
Figure 2D	Vent	GFP	34	1159	770 (66±0.5%)	155 (13±0.4%)	234 (20±0.6%)
	Vent	Smad3	36	971	643 (66±1.6%)	121 (12±0.1%)	207 (21±1.7%)
Figure 3A	Vent	GFP, 200pM TGFβ2, control siRNA	25	1103	869 (79±2.3%)	116 (11±1.5%)	118 (11±0.9%)
	Vent	TGFβR3, TGFβ2, control siRNA	23	716	332 (46±1.1%)***	76 (11±1.9%)	308 (43±1.2%)***
	Vent	GFP, TGFβ2, Par6cA siRNA	25	993	748 (75±3.5%)	133 (14±2.0%)	112 (12±1.7%)
	Vent	GFP, TGFβ2, Par6cB siRNA	24	910	706 (78±0.9%)	101 (11±0.1%)	103 (11±0.8%)
	Vent	TGFβR3, TGFβ2, Par6cA siRNA	24	687	541 (79±1.4%)***	75 (11±1.1%)	71 (10±0.4%)***
	Vent	TGFβR3, TGFβ2, Par6cB siRNA	24	744	572 (77±2.0%)***	91 (12±2.0%)	81 (11±0.6%)***
Figure 3B	Vent	GFP, 200pM TGFβ2, control	23	942	749 (80±3.1%)	100 (11±1.5%)	93 (10±2.1%)

		siRNA					
	Vent	TGFβR3, TGFβ2, control siRNA	22	727	354 (49±2.5%)***	72 (10±1.0%)	301 (41±3.1%)***
	Vent	GFP, TGFβ2, Smurf1A siRNA	24	945	702 (75±2.3%)	124 (13±1.9%)	119 (13±0.6%)
	Vent	GFP, TGFβ2, Smurf1B siRNA	22	832	645 (78±2.0%)	93 (11±0.9%)	94 (11±1.1%)
	Vent	TGFβR3, TGFβ2, Smurf1A siRNA	23	673	523 (78±3.5%)**	76 (11±1.6%)	74 (11±2.0%)**
	Vent	TGFβR3, TGFβ2, Smurf1B siRNA	23	758	586 (77±0.5%)**	86 (11±1.2%)	86 (11±1.3%)**
Figure 4A	Vent	GFP, 5 nM BMP-2, vehicle (DMSO)	30	1126	849 (75±1.1%)	142 (13±1.4%)	135 (12±0.6%)
	Vent	GFP, BMP-2, 2.5 μM SB431542	31	921	768 (83±0.7%)	72 (8±0.4%)	81 (9±0.7%)
	Vent	TGFβR3, BMP-2, vehicle	28	564	356 (63±2.0%)**	52 (9±1.6%)	156 (28±2.2%)**
	Vent	TGFβR3, BMP-2, SB431542	28	474	425 (90±0.7%)**	25 (5±0.9%)	24 (5±0.6%)**
Figure 4C	Vent	GFP, TGFβ2, control siRNA	25	803	631 (79±1.7%)	77 (9±1.1%)	93 (12±0.6%)
	Vent	TGFβR3, TGFβ2, control siRNA	25	1027	497 (48±1.0%)***	85 (8±0.2%)	445 (43±0.8%)***
	Vent	GFP, TGFβ2, ALK5A siRNA	25	876	720 (82±0.4%)	72 (8±0.7%)	84 (10±1.1%)

	Vent	GFP, TGFβ2, ALK5B siRNA	24	831	720 (79±2.1%)	72 (9±0.4%)	84 (12±1.7%)
	Vent	TGFβR3, TGFβ2, ALK5A siRNA	24	668	529 (81±1.8%)***	60 (9±0.5%)	79 (10±1.3%)***
	Vent	TGFβR3, TGFβ2, ALK5B siRNA	23	642	523 (77±1.7%)***	56 (12±1.3%)	63 (11±1.0)***
Figure 4D	Vent	GFP, BMP-2, control siRNA	23	763	609 (80±1.2%)	71 (9±0.4%)	83 (11±1.7%)
	Vent	TGFβR3, BMP-2, control siRNA	23	914	437 (48±0.7%)***	89 (10±0.6%)	388 (42±0.3%)***
	Vent	GFP, BMP-2, ALK5A siRNA	24	948	764 (81±0.7%)	91 (10±0.5%)	93 (10±0.2%)
	Vent	GFP, BMP-2, ALK5B siRNA	24	904	747 (83±0.7%)	70 (8±0.5%)	87 (10±0.3%)
	Vent	TGFβR3, BMP-2, ALK5A siRNA	24	470	361 (77±0.6%)***	53 (11±0.7%)	56 (11±0.9%)***
	Vent	TGFβR3, BMP-2, ALK5B siRNA	24	524	403 (77±1.7%)**	61 (12±1.3%)	60 (11±1.0)***
Figure 4E	Vent	GFP, BMP-2, control siRNA	24	778	603 (77±1.2%)	83 (11±1.3%)	92 (12±0.4%)
	Vent	GFP, BMP-2, Par6cA siRNA	24	968	779 (80±0.6%)	82 (8±0.4%)	107 (11±1.1%)
	Vent	GFP, BMP-2, Par6cB siRNA	24	906	743 (82±0.2%)	76 (8±0.2%)	87 (10±0.3%)

	Vent	GFP, BMP-2, Smurf1A siRNA	24	921	740 (80±0.8%)	87 (9±0.3%)	94 (10±0.6%)
	Vent	GFP, BMP-2, Smurf1B siRNA	24	896	748 (84±0.6%)	69 (8±0.2%)	79 (9±0.5%)
	Vent	TGFβR3, BMP-2, control siRNA	24	843	410 (49±1.9%)***	80 (10±0.4%)	353 (42±2.2%)**
	Vent	TGFβR3, BMP-2, Par6cA siRNA	24	538	420 (78±1.9%)***	54 (10±0.9%)	61 (12±1.1%)**
	Vent	TGFβR3, BMP-2, Par6cB siRNA	24	549	430 (78±0.9%)***	54 (10±0.1%)	65 (12±0.8%)**
	Vent	TGFβR3, BMP-2, Smurf1A siRNA	24	504	387 (77±0.9%)***	63 (12±0.8%)	54 (12±0.2%)**
	Vent	TGFβR3, BMP-2, Smurf1B siRNA	24	515	398 (77±1.2%)***	62 (12±0.6%)*	55 (11±0.8%)**
Figure S1	Vent	GFP, vehicle	24	780	614 (79±1.1%)	80 (10±0.7%)	86 (11±0.6%)
	Vent	GFP, 200 pM TGFβ2	23	812	651 (80±1.6%)	87 (11±0.8%)	74 (9±0.9%)
	Vent	GFP, 5 nM BMP-2	25	908	718 (79±0.3%)	88 (10±0.5%)	102 (11±1.2%)
	Vent	TGFβR3, vehicle	22	617	504 (82±0.8%)	58 (9±1.0%)	55 (9±1.6%)
	Vent	TGFβR3, TGFβ2	25	737	324 (44±0.9%)***	71 (10±1.1%)	342 (46±0.8%)***
	Vent	TGFβR3, BMP-2	24	743	362 (49±1.1%)***	89 (12±0.7%)	292 (39±0.2%)***
Asterisks denote significance as follows: **P<0.05, **P<0.01, ***P<0.001*							

Supplemental Table 2. siRNA target sequences		
ALK5A	5'(GCUACGACAUGAAAAUUTT)3'	
ALK5B	5'(GGAUAUUGCUGCCUUUUAATT)3'	
Smad1A	5'(GGAGUUCGCUCAGCUCUUATT)3'	
Smad1B	5'(GCAGGGAGAUGAAGAAGAATT)3'	
Smad2A	5'(GGAUUGAACUUCAUCUGAATT)3'	
Smad2B	5'(CCACCUCCAGGAUAUAUCATT)3'	
Smad3A	5'(GGAUGUAACUUGAAUAUUUTT)3'	
Smad3B	5'(GGAUGUGCACGAUUCGGAUTT)3'	
Smad5A	5'(GCAAUACAAUGAUCCCUCATT)3'	
Smad5B	5'(GGUUUGCUCUCAAAUGUUATT)3'	
TGFβR3	5'(GGAAGUAAAUCUACUUGAATT)3'	
Scrambled high GC content (62%)	5'(AGACTGTCGCGTGCTCTGTCC)3'	
Scrambled medium GC content (38%)	5'(CTCCTUGTCAATTTACCGCTT)3'	
Scrambled low GC content (29%)	5'(AAAAGGAUCUGAUAACGUATT)3'	

Supplemental Table 3. Primer pairs		
Target	Forward (5'→3')	Reverse (5'→3')
Smad4	GTGCCACAGACAGATGCAACAACA	TTTGACGAAGCTCATGCGGAGGAT
ALK5	ACCAGAGTGGCGTGTTAAGAAGGT	TGC ACAGAAAGGACCCAAAGCAAC
GAPDH	GGGCACGCCATCACTATCTTCC	GAGGGGCCATCCACCGTCTT
Smad1	CTGCTCTCCAATGTTAACCG	GCATTCAGCGTACACTTCTC
Smad2	TTTTGTTCAGAGCCCCAAC	ACCCTGATTCACAGCCTGAG
Smad3	TGTAAACCAGGGCTTCGA	AGGTGCAGCTCAATCCA
Smad5	ATGTGCACCATCCGAATG	GGGTGCTTGTGACATCTT
TGFβR3	GCTGAAGGCAGCAGCTTTGATTAT	ACATTGGTGATGTGAGGCTCAGGA