Oligo name	Gene	Accession
Ptch1PF	Ptch1	NM_008957
Ptch1PR	Ptch1	NM_008957
Ptch1PMut1F	Ptch1	NM_008957
Ptch1PMut1R	Ptch1	NM_008957
Ptch1PMut2F	Ptch1	NM_008957
Ptch1PMut2R	Ptch1	NM_008957
Ptch1PMut3F	Ptch1	NM_008957
Ptch1PMut3R	Ptch1	NM_008957
EMSA1F	Ptch1	NM_008957
EMSA1R	Ptch1	NM_008957
EMSA2F	Ptch1	NM_008957
EMSA2R	Ptch1	NM_008957
EMSA3F	Ptch1	NM_008957
EMSA3R	Ptch1	NM_008957
EMSA1CF	Ptch1	NM_008957
EMSA1CR	Ptch1	NM_008957
EMSA2CF	Ptch1	NM_008957
EMSA2CR	Ptch1	NM_008957
EMSA3CF	Ptch1	NM_008957
EMSA3CR	Ptch1	NM_008957
ChiP1F	Ptch1	NM_008957
ChiP1R	Ptch1	NM_008957
ChiP2F	Ptch1	NM_008957
ChiP2R	Ptch1	NM_008957
ZNF431F	ZNF431	BC_012405
ZNF431R	ZNF431	BC_012405
Ptch1F	Ptch1	NM_008957
Ptch1R	Ptch1	NM_008957
CbapF		
StopR		
ZNF-R2		
HAZNF431F	ZNF431	BC_012405
HAZNF431R	ZNF431	BC_012405
ZNF431 RNAiR	ZNF431	BC_012405
CDOF	CDO	NM_021339
CDOR		
BOCF	BOC	NM_172506
BOCR		
DISP1F	DISP1	NM_026866
DISP1R		
DISP2F	DISP2	NM_170593
DISP2R		
FUF	Stk36	NM_175031
FUR		
HhatF	Hhat	NM_144881
HhatR		
Kif7F	Kif7	
Kif7R		
SmoF	Smo	NM_176996

SmoR		
SufuF	Sufu	AF134893
SufuR		
IHH F	Ihh	NM_010544
IHH R		
DHH F	Dhh	NM_007857
DHH R		
Shh F	Shh	NM_009170
Shh R		
Gli1 F	Gli1	NM_010296
Gli1 R		
Gli2 F	Gli2	NM_001081125
Gli2 R		
Gli3 F	Gli3	NM_008130
Gli3 R		

RNAi Constructs

ShRNA1	ZNF431	BC_012405
ShRNA2	ZNF431	BC_012405
ShRNA3	ZNF431	BC_012405
ShRNA4	ZNF431	BC_012405
ShRNA5	ZNF431	BC_012405

Sequence	Position
5’-ACAGGGTGTGTATCGAGCTT-3’	-1741- -1722
5’-GTTGCCGCCGCCGCCGC-3’	-17- -1
5’-GGACCGCGAGGCGAGCTCTGGAAGCGCCGG-3	-278- -249
5’- CCGGCGCTTCCAGAGCTCGCCTCGCGGTCC -3	-278- -249
5’-GCAGCACCCGCAGAGCTCGCCGTGTGAGCG-3	-133- -104
5’-CGCTCACACGGCGAGCTCTGCGGGTGCTGC-3’	-133- -104
5’-CTCGCGAGCCGAGAGCTCAGGCGCGCCGGA-3	-51- -25
5’- TCCGGCGCGCCTGAGCTCTCGGCTCGCGAG-3	-51- -25
5’- ATGCCGAGGCGCGCCCTGGAAGC-3’	-272- -254
5’- ATGCGCTTCCAGGGCGCGCCTCG-3’	
5’-ATGCCCCGCAGCGCCCGCCGTGT-3’	-137- -109
5’-ATGCACACGGCGGGCGCTGCGGG-3’	
5’- ATGCAGCCGAGCGCCCAGGCGCG-3’	-45- -27
5’- ATGCCGCGCCTGGGCGCTCGGCT-3’	
5’- ATGCCGAGTCTATAAATTTAAGC-3’	-272- -254
5’- ATGCGCTTAAATTTATAGACTCG-3	
5’- ATGCCCCGCATATAAAGCCGTGT-3’	-137- -109
5’- ATGCACACGGCTTTATAGCGGG-3’	
5’- ATGCAGCCTATATAAAATTCGCG -3’	-45- -27
5’- ATGCCGCGAATTTTATATAGGCT -3’	
5’-GCAAAGACCTCGGGACTCAC-3’	-298 - -276
5'-GTGAGTCCCGAGGTCTTT -3'	-206 - -189
5’- AAGGCGCAGGGTCTGAGT -3’	-171- -154
5’- TACCAGCCGAGGCCATGT -3’	16-1
5’-TAGGGAGTGTGGCCTTTCTG- 3’	1831-1850
5’-GTGTCCAAGCAGACATGGTG- 3’	1985-1966
5’-CTATGAGAGCTACCCTGAGACTGA-3’,	4152-4175
5’-CTGTAGCTCTATGACCTCCACCTT-3 ’	4260-4237
5’-TATGGTAATCGTGCGAGAGG-3’	
5’-AAACGAAAAGGCCGAGATCG-3’	
5’- TCAGCAAAGCCCATTCTTCT-3’	
5’-CCCTGTGTGGATCTCAAGGT-3’	
5’-AATGTGAGCAATGTGGCAAA-3 ’	
5'-TGCGTTCTTTTATGCATTCG-3'	1725-1706
5'-GGAACCAGTCCAGAACGTGT-3'	6516-6535
5'-GGAGAGATTCCCGAACATGA-3'	6639-6620
5'-CTGGCACAAGACAGAAAGCA-3'	4031-4050
5'-TAGGGTCCTTCCACCAAGTG-3'	4176-4157
5'-GTCTTCCCAGGACAGCAGAG-3'	4545-4564
5'-CTGTGTCCCCTGGGTCTCTA-3'	4676-4657
5'-TCCGAGGGGTGTGAGTTTAG-3'	6062-6081
5'-GGTGGTCTTCATGCCAAGAT-3'	6174-6155
5'-CTTGGGCCCTTTTCTAGCTT-3'	4698-4717
5'-GCCCCAGTCGTGTCTGTATT-3'	4825-4806
5'-TCAAGTGGCCCAGCTAGAGT-3'	2453-2472
5'-GCTGTGAGAGGAACCACCAT-3'	2596-2577
5'-CTGAACCTCTCTGGCAGTCC-3'	3780-3799
5'-AAGCTTGAGCGTTTCCATGT-3'	3888-3869
5'-CTTCAGGACCCTTGCTTCTG-3'	3107-3126

5'-ACCATCATCCCTGTCTCTGC-3'	3210-3191
5'-TCCAGGTTACCGCTATCGTC-3'	302-321
5'-GAGATCACTCAGGCCAAAGC-3'	441-422
5'-CCGAACCTTCATCTTGGTGT-3'	1832-1851
5'-CCCCGAGAAACATTGGAGTA-3'	1987-1968
5'-ATCCACGTATCGGTCAAAGC-3'	812-831
5'-GTAGTTCCCTCAGCCCCTTC -3'	926-907
5'-CCTCTCCTGCTATGCTCCTG-3'	2132-2151
5'-GTGGCGGTTACAAAGCAAAT-3'	2379-2360
5'-GAAGGAATTCGTGTGCCATT-3'	965-984
5'-GCAACCTTCTTGCTCACACA-3'	1184-1165
5'-CCACAGACATGTGCGTATCC-3'	6178-6197
5'-CACACCACAAGAGCCAGAGA-3'	6419-6400
5'-TGCCCATCAGCTACTCAGTG-3'	4409-4428
5'-TTGTTGCAGAGTGAGGTTGC-3'	4658-4639

GCCTTTGCAAATCAAAGTTAT	1513-1533
GCATACTAAAGAGTAACCCTA	1723-1743
GCCTATTCACGACACAGCATT	421-441
GCCTCTCATAATAAACTTCAA	1183-1203
CCTCTCATGGTCAACTTCAAA	932-952

Note
1.7kb promoter
1.7kb promoter
SMG1
SMG1
SMG2
SMG2
SMG3
SMG3
EMSA

EMSA

EMSA

Realtime

Realtime

Genotyping Common
Genotyping Flox
Genotyping delta
HA