

Material Suplementario

Gen	E-value	p-value	Anc ho	Secuencia	Lista de motivos encontrados	Mutaciones dentro del motif
GLI2	1.30 E-05	6.31 E-33	48	TCTTTCGTTCTCTGCTGGAAC TTTCTTCGTAGGTGTGCTT TCTCTCTA	CENPB_full, UP00199_1 (Six4_2860.1), MA1592.1 (ZNF274), MA0508.3 (PRDM1), TBX21_DBD_1, TBX21_full_1, MA0770.1 (HSF2), MA0771.1 (HSF4), HSF2_DBD, HSF4_DBD, HSF1_DBD, MA1720.1 (ZNF85), MA0805.1 (TBX1), TBX1_DBD_3, MA0803.1 (TBX15), TBX15_DBD_2, MA0486.2 (HSF1), HSF1_full, MA0801.1 (MGA), MGA_DBD_1, GLI2_DBD_1	No
	2.00 E-03	3.12 E-32	50	ATCTGACTTGAGTTAGCGACCCCCACCCACCCGGCGC CTTAAAAAAAAA	MA0039.4 (KLF4), ZNF740_full, UP00021_1 (Zfp281_primary), MA1627.1 (Wt1), MA0073.1 (RREB1), ZNF740_DBD, MA0735.1 (GLIS1), GLIS1_DBD, MA1107.2 (KLF9), MA0737.1 (GLIS3), GLIS3_DBD, Zfp740_DBD, MA0162.4 (EGR1), MA0695.1 (ZBTB7C), ZBTB7C_full, MA1653.1 (ZNF148), UP00043_2 (Bcl6b_secondary), MA1961.1 (PATZ1), PRDM4_full, MA0493.2 (KLF1), MA1514.1 (KLF17), UP00022_1 (Zfp740_primary), MA0753.2 (ZNF740), UP00024_1 (Glis2_primary), MA1630.2 (ZNF281), ZIC3_full, MA1584.1 (ZIC5), MA1650.1 (ZBTB14), ZBTB7B_full,	No

					MA0694.1 (ZBTB7B), SP3_DBD, MA1125.1 (ZNF384), MA1998.1 (Prdm14), UP00057_1 (Zic2_primary)	
	3.80 E-03	1.71 E-30	47	AAGAGGGAGGTGGGGAGGGCGGGGATTTTCAGAGATT GAAAACAGAA	MA0753.2 (ZNF740), UP00021_1 (Zfp281_primary), MA1961.1 (PATZ1), ZNF740_full, ZNF740_DBD, MA1522.1 (MAZ), MA1959.1 (KLF7), MA1999.1 (Prdm5), MA0516.3 (SP2), MA0742.2 (KLF12), MA0493.2 (KLF1), Zfp740_DBD, MA1652.1 (ZKSCAN5), MA1513.1 (KLF15), MA0685.2 (SP4), MA1511.2 (KLF10), MA1653.1 (ZNF148), UP00022_1 (Zfp740_primary), MA0471.2 (E2F6), MA0073.1 (RREB1), MA0079.5 (SP1), MA1630.2 (ZNF281), MA0101.1 (REL), MA0039.4 (KLF4), MA0107.1 (RELA), MA0740.2 (KLF14), MA0597.2 (THAP1), MA0528.2 (ZNF263), MA1587.1 (ZNF135), MA0149.1 (EWSR1-FLI1), MA1650.1 (ZBTB14), MA1723.1 (PRDM9), MA1155.1 (ZSCAN4), ZSCAN4_full, MA0136.3 (Elf5), MA1564.1 (SP9), MA1565.1 (TBX18), MA1965.1 (SP5)	No
LHX9	1.60 E-02	3.48 E-31	49	ACACCGACCCCATGGATTTTGCAGAGCCAGGAAGGGAG GGGCTTTTATT	MAFF_DBD, MA1992.1 (Ikzf3), MA0598.3 (EHF), MA0761.2 (ETV1), MA0062.3 (GABPA), MA0496.3 (MAFK), MA0599.1 (KLF5), MA0474.3 (Erg), MA0473.3 (ELF1), MA1520.1 (MAF), MA1521.1 (MAFA), CPEB1_full,	No

					MA0149.1 (EWSR1-FLI1), MA1578.1 (VEZF1), MA1522.1 (MAZ), MA1965.1 (SP5), MAFK_full_2	
INHA	1.90 E-02	1.62 E-31	50	TCTGTCTCCCTGACAAATAACGCTTTTTAGACCTGGCAG ACCCCCAGTTA	MA1544.1 (OVOL1), UP00081_1 (Mybl1_primary), MA1726.1 (ZNF331), Irx3_DBD, LHX6_full_2, MA1545.1 (OVOL2), UP00203_1 (Pknox1_2364.2), SPII_full	No
	1.90 E-02	1.62 E-31	50	TGACACTGTGTGACTCTGTGTGGAGAGCGAGGGTTTGTA TGTGTGGTTTA	RUNX3_full, RUNX3_DBD_2	No
PPARGC 1B	9.60 E-06	1.38 E-33	48	AGAGGACCTCGTTTGATGCCACGATATAGTTTAATACM GGAAAAACAAA	UP00028_2 (Tcfap2e_secondary), THRB_DBD_3, MA1975.1 (ZNF214), UP00198_1 (Cphx_3484.1)	Si
	1.30 E-02	3.92 E-31	49	TTACGAGACAACCTGCTTCGGCACAGCTGGGGAAACTG AGGCCTCAGAA	MA1596.1 (ZNF460), MA1945.1 (ETV5::FIGLA), MA1628.1 (Zic1::Zic2), MA1619.1 (Ptf1A), MA1635.1 (BHLHE22), MA1966.1 (TFAP4::ETV1), MA1629.1 (Zic2), MA1472.2 (Bhlha15), MA0633.2 (Twist2), MA1941.1 (ETV2::FIGLA), MA0521.2 (Tcf12), Zic3_DBD, NHLH1_DBD, MA1930.1 (CTCF), FOXO1_DBD_3	No
PPARGC 1A	2.20 E-05	5.69 E-33	49	AAATTATTTTCATATAGTTGCTACGTCTCGATTTTTTTTT TCCCCCTTT	UP00058_2 (Tcf3_secondary), MA0627.2 (POU2F3), ONECUT1_full, Pou2f2_DBD_2, IRF7_DBD_2, UP00074_1 (Isgf3g_primary), ONECUT2_DBD, MA1115.1 (POU5F1), MA0845.1 (FOXB1), FOXB1_DBD_3	No
	4.80 E-05	2.81 E-33	50	TTCCTCCCAGCCTCTCTGAAGATTTTTTATTTTAATTCCT AAAAATTGCTT	CPEB1_full, UP00000_2 (Smad3_secondary), SOX9_full_5, UP00119_1 (Nkx2-	No

					9_3082.1), MA1125.1 (ZNF384), HMX1_DBD, UP00077_2 (Srf_secondary), MA0041.2 (FOXD3), UP00061_2 (Foxl1_secondary), UP00135_1 (Hoxc12_3480.1), UP00217_1 (Hoxa10_2318.1), SOX8_full_3, MA1731.1 (ZNF768)	
	2.10 E-02	1.98 E-31	50	TGGGTGTTTtagggaggggTCGCCCAAGCCTGTACAAG AAAAGAAAAGAT	UP00068_2 (Eomes_secondary), MA0029.1 (Mecom), UP00088_1 (Plagl1_primary), UP00088_2 (Plagl1_secondary), MA0898.1 (Hmx3), UP00157_1 (Hmx3_3490.2), MA0897.1 (Hmx2), UP00155_1 (Hmx2_3424.3), MA1970.1 (TRPS1), MA1104.2 (GATA6), UP00028_2 (Tcfap2e_secondary), MA1578.1 (VEZF1)	No
SCYL	2.90 E-02	1.51 E-31	50	AAGTCGATAGAAAGATATGAAAGGATGCAGTGTTCAGT GGGAAAAAACTT	MA1970.1 (TRPS1), SOX8_DBD_3, SOX4_DBD, MA0036.3 (GATA2), MA0037.4 (Gata3), UP00055_2 (Hbp1_secondary), MA1561.1 (SOX12), SOX8_full_1, MA0482.2 (GATA4), MA0690.2 (TBX21), TBR1_full, SOX8_DBD_1, MA1104.2 (GATA6), SOX10_full_1, UP00096_2 (Sox13_secondary), SOX9_full_1, MA1636.1 (CEBPG), MA0029.1 (Mecom)	No
	2.50 E-03	1.32 E-31	49	AAACGAAACTCTGTAAAAATTAGCCAGAACTTGGTTA CAGCGTGTTTA	MA1509.1 (IRF6), UP00183_1 (Hoxa13_3126.1)	No
VCAN	1.50 E-02	1.16 E-31	50	ATTGAGCAATCTACAAAGACCCTGCTAATAACGGGGCT GGACAGGAAATT	MA0838.1 (CEBPG), CEBPG_DBD, CEBPG_full, Cebpb_DBD, MA0837.2 (CEBPE), CEBPB_full, CEBPD_DBD, MA0466.3 (CEBPB), CEBPB_DBD, CEBPE_DBD	No

TSHR	2.70 E-04	3.59 E-33	50	AGTTGGGTTT AGGG ACCAGCAAAGGAGGGAAAAATCCAA ACCAGGCTTTTT	MA1987.1 (ZNF701), TBX2_full_1, TBX5_DBD_2, MGA_DBD_3, MA1105.2 (GRHL2), UP00068_1 (Eomes_primary), MA0800.1 (EOMES), EOMES_DBD_1, TBX4_DBD_2, MA1725.1 (ZNF189), UP00086_1 (Irf3_primary), TBR1_full, MA0690.2 (TBX21), RHOXF1_DBD_1, MA1656.1 (ZNF449), RHOXF1_full_1, MA1566.2 (TBX3), UP00074_1 (Isgf3g_primary), MA0688.1 (TBX2), TBX2_full_2	No
	2.20 E-03	1.75 E-32	50	TCCTCCCCAGAAGGACAGTCCGTTCCACTGGAAC TTGT CAGTTTAGAGA	MA1994.1 (Nkx2-1), MA0144.2 (STAT3), NFIB_full, MA2003.1 (NKX2-4)	No
HOXA13	2.60 E-03	3.68 E-31	48	TGGGGACAGGTCAGGTA AAATCTGCGGGC ATCTGGGGAC GRTAAAGTAT	MA1929.1 (CTCF), MA1576.1 (THRB), MA0471.2 (E2F6), MA0139.1 (CTCF), MA1979.1 (ZNF416), MA0597.2 (THAP1), IRX5_DBD	Sí
	5.50 E-03	3.54 E-31	49	TAGACCAGGCTGGGTGTTTCC TGGGGCCTCTGGCGCCGT TTCTTTACA	E2F4_DBD_1, MA0154.4 (EBF1), MA1969.1 (THRA), MA1655.1 (ZNF341), MA0735.1 (GLIS1), GLIS1_DBD, MA0814.2 (TFAP2C), Rarb_DBD_2, MA0095.3 (Yy1), MA0157.3 (Foxo3), MA1976.1 (ZNF320), MA1548.1 (PLAGL2), MA0470.2 (E2F4), MA1606.1 (Foxf1), MA1489.1 (FOXN3), E2F1_DBD_1, MA1934.1 (ERF::FIGLA), MA1990.1 (Gli1), RARG_DBD_3, FOXB1_full	No
KITLG	2.20 E-06	4.25 E-34	50	TAACTATATAGATCCTAATTAAGCTTTAAACATTTTTTTT CCCTTAAGCA	UP00028_2 (Tcfap2e_secondary), MA0618.1 (LBX1), MA0075.3 (PRRX2), Uncx_DBD_2,	No

					MA0701.2 (LHX9), MA0716.1 (PRRX1), PRRX1_DBD, MA1519.1 (LHX5), MA0675.1 (NKX6-2), NKX6-2_full, Prrx2_DBD, NKX6-2_DBD, MA0674.1 (NKX6-1), NKX6-1_full, Vsx1_DBD, MA0654.1 (ISX), PRRX1_full_1, PRRX2_full, ISX_full, ISX_DBD_2, PAX4_DBD, SHOX_DBD, LMX1B_full, NFATC1_full_1, UNCX_DBD_2, MA0717.1 (RAX2), MA0720.1 (Shox2), MA0721.1 (UNCX), MA0630.1 (SHOX), LHX9_DBD_1, Nkx6-1_DBD, RAXL1_DBD, Shox2_DBD, SHOX2_DBD, MA0704.1 (Lhx4), MA0726.1 (VSX2), Lhx4_DBD, VSX2_DBD, FOXD2_DBD_1,MA 0666.2 (MSX1), NR4A2_full_3, MA0068.2 (PAX4), MA0642.2 (EN2), MA1577.1 (TLX2), PAX4_full	
GDNF	2.80 E-04	2.87 E-32	49	TTCTGCCCTGCAGAAAAGCCAGAGAGCTAGACATCGAG GTGGAAGGAAA	MA1153.1 (Smad4), MA0597.2 (THAP1)	No
	1.00 E-03	2.63 E-32	50	TCAAGTTCGATTCTCCCTTCGGTTGGTCCGCGCAGAT CTCCGCACATT	None	No
LIN28A	3.60 E-03	7.07 E-32	50	TGGGAGGGCCACGGCTTTTCAAAGGCTCCCAAATTCTA AAAGACAATGA	PRDM4_full, MA0676.1 (Nr2e1), NR2E1_full_1, Nr2e1_DBD_1, MA0515.1 (Sox6), Nr2e1_DBD_2	No
	3.60 E-03	7.07 E-32	50	TCAACCCTACAAGTCTTGAGTACCCGGAATTTGGGATC CCGCACTTTAA	TBX21_full_3, SOX10_full_1, MA0866.1 (SOX21), SOX21_DBD_1, SOX8_full_1, MA0809.2 (TEAD4),	No
	1.50 E-02	2.12 E-31	50	AGAACCTAGAGGTTTGACACCCCCTCCACAGACACCA CATCTGGAGATT	MA1627.1 (Wt1), MA1965.1 (SP5), ZNF740_full, ZNF740_DBD, Zfp740_DBD, MA1565.1 (TBX18), MA1653.1 (ZNF148), MA0698.1 (ZBTB18), ZNF238_full, MA0753.2	No

					(ZNF740), ZNF238_DBD, MA0803.1 (TBX15), MA0805.1 (TBX1), TBX15_DBD_2, TBX1_DBD_3, MA1652.1 (ZKSCAN5), UP00021_1 (Zfp281_primary), MA1630.2 (ZNF281), TBX1_DBD_5, MA0801.1 (MGA), MGA_DBD_1	
RSPO1	6.60 E-04	1.63 E-32	50	TGTTCTTGTCACTTTCCAGGTTCTGATGGGAAAACCTG AGATTTTGGTA	MA0809.2 (TEAD4), MA2001.1 (Six4), MA0138.2 (REST), MA1647.2 (Prdm4), MA1649.1 (ZBTB12), Sox10_DBD_1, MA0482.2 (GATA4), MA0090.3 (TEAD1), MA1121.1 (TEAD2), Sox11_DBD	No
	2.80 E-03	4.73 E-32	50	TGGAGGTTATAGCCAGTTCTCTGAACTGGGAAGATGGT CTGAAGAGTTGA	None	No
	2.20 E-02	2.35 E-30	48	TATCTAGGCTTTGCTTCAAGATCTACCTGGCTATCCTGC ACCAGCCGA	MA1558.1 (SNAI1), ID4_DBD	No
BMPRI B	8.40 E-05	1.97 E-33	50	TTTCTCGGTCATGTGTAAGAAGGGGTTTTTAAAAA AAAAAAAAAAAA	MA1125.1 (ZNF384), UP00077_2 (Srf_secondary), UP00097_2 (Mtf1_secondary), MA0679.2 (ONECUT1), Esrra_DBD_2, UP00037_1 (Zfp105_primary), MA0052.4 (MEF2A), UP00090_2 (Elf3_secondary)	Sí
	1.70 E-03	2.99 E-32	50	TTTTTTTTTTTTTCTCTCTCTAGCTCTCTGCTGCCTC TGGAATTTT	MA1125.1 (ZNF384), UP00058_2 (Tcf3_secondary), MA0496.3 (MAFK), UP00097_2 (Mtf1_secondary), MA0081.2 (SPIB), MA0080.6 (Spi1), UP00038_1 (Spdef_primary), MA1723.1 (PRDM9)	No
	1.90 E-02	4.76 E-31	49	TTTTTTTTTTTCACTTGCCCTCTCCAGCTCCCACTAGTGA TTGGAGCCT	MA0081.2 (SPIB), MA1125.1 (ZNF384), UP00077_2 (Srf_secondary), MA0051.1 (IRF2), UP00045_2 (Mafb_secondary), UP00028_2 (Tcfap2e_secondary), MA0080.6 (Spi1),	No

					MA1731.1 (ZNF768), MA0159.1 (RARA::RXRA), UP00131_1 (Gbx2_3110.1), UP00058_2 (Tcf3_secondary), RARA_DBD_2, UP00220_1 (Nkx1-1_3856.3), MA0729.1 (RARA), CTCF_full, PRDM1_full	
NR5A1	2.30 E-06	2.44 E-33	49	TCTATTTTTTTTTTTTTTTTTTTCTTCTCCTAAAAGAAAA AAAAAATA	MA1125.1 (ZNF384), MA0679.2 (ONECUT1), UP00097_2 (Mtf1_secondary), UP00037_1 (Zfp105_primary), UP00077_2 (Srf_secondary), UP00058_2 (Tcf3_secondary), UP00041_1 (Foxj1_primary), MA0041.2 (FOXD3), UP00073_1 (Foxa2_primary)	No
	3.60 E-02	1.86 E-31	50	ACGTGACTCTGCAGGCCTCTCTCCTTCTTTGTTGGTGTTT CTCTTCATTT	UP00145_1 (Barhl2_3868.1), UP00102_2 (Zic1_secondary), MA1623.1 (Stat2), UP00057_2 (Zic2_secondary), UP00025_1 (Foxk1_primary), MA0657.1 (KLF13), KLF13_full	No
AMH	5.30 E-04	1.63 E-32	50	AGACTCTTTAATGGGGACACCTAGCCCAGTACAAAAAA ACTCTACTCTGA	Hoxd9_DBD_1, MA1530.1 (NKX6-3), UP00090_2 (Elf3_secondary)	No
	2.30 E-03	4.73 E-32	50	AAAACCCAGGAAAACCAAACCAGACTTGCTAGGATAGG GGTGGCTTTTCA	MA1597.1 (ZNF528), MA0051.1 (IRF2), MA0517.1 (STAT1::STAT2), UP00002_2 (Sp4_secondary), MA1971.1 (ZBED2), IRF8_DBD	No
DHH	3.50 E-02	1.64 E-31	50	TAAGTTTATGCGTGCCACCAAACCATCCTCCTGATAC TTGAATTAGAT	MA0119.1 (NFIC::TLX1), PHOX2B_full, MA1463.1 (ARGFX), PHOX2B_DBD, MA0713.1 (PHOX2A), PHOX2A_DBD, MA1977.1 (ZNF324), MA1643.1 (NFIB), Alx1_DBD_1, MA1528.1 (NFIX), ALX4_DBD,	No

					MA0715.1 (PROP1), PROP1_DBD, PROP1_full	
SOX9	1.10 E-02	8.71 E-32	50	TCCAAAAGTGCTTAGAAAATTGTCTTTTGAAGCAAATGTT TTGGTGACTCA	MA0817.1 (BHLHE23), BHLHE22_DBD, MA0676.1 (Nr2e1), NR2E1_full_1, Nr2e1_DBD_1, MA0099.3 (FOS::JUN)	No
	4.70 E-02	6.28 E-31	50	ACTTCCAAGTGTGTAAGTTTGCCGTCCTCTCTTAATATC AAAATTCGGT	MA0081.2 (SPIB), UP00023_2 (Sox30_secondary), MA0507.2 (POU2F2), FOXJ3_DBD_3, MA0784.2 (POU1F1), MA0785.1 (POU2F1), POU2F1_DBD_1, FOXJ2_DBD_3	No
INSL3	4.30 E-02	4.43 E-31	49	GGCTCCCGAGCTTGACCCYAACAAAAGCAGGAACCCAG GCCAACGCTGC	MA0014.3 (PAX5), MA1709.1 (ZIM3), UP00085_2 (Sfp1_secondary), MA1541.1 (NR6A1), MA1154.1 (ZNF282), ZNF282_DBD, MA1646.1 (OSR2), MA1616.1 (Prdm15), NR2F1_full	Sí

Tabla 2B. Tabla general de las mutaciones encontradas dentro de los motivos nucleotídicos, marcados en rojos los afectados. Obtención propia.

Promotor SOX9 REVERSE, SNP 0, INSERCION GT

19:59916130-59916630

ATTGGGCCCGATTTAGGGGGGGGGGGGAGGACTGTGGCGCTGGGCAGGGTGAC
GAGAGGAGAGGGGAGGAGCGGGGAGGCGATCGCAGCCTCTGGTCCCGCGGGG
GATTGGGGGGGTGCACCGGGGAAGGCGGGGGACCCGGGACTTCCAAGTGTGTA
AGTTTGCCGTCCTCTCTTAATATCAAATTCGGTGCCGTCCTCTGCGCGAACTTT
G**CGTGTGTGTGTGTGTGTGTGTGTGTGTGT**ACTAAGATTTGTCCCCACCCACAAGC
ATTTCTGTTTCAGTTTCTCCGCGGTCCCGGGGACTTAACTGGGTTTGCAGTATTC
GAAAAGCTGTCGCTCCTTCCTTAAATCCTAGCCCAGTTTCCGCTCCTGGAGCCTG
CCTCCTCCAAAAGTGCTTAGAAAATTGTCTTTTGAAGCAAATGTTTTGGTGACTCA
ACGTCGCCCGTTCTCTGTAATAATCCGTATAAATAGATGAACATGCTCTGGTTCCG
CCGGAGCCCGTGCGG

Promotor AMH Reverse, 1 SNP

7:89236462-89236962

GTGCAGGTGGGACCCTGACACCCCCTTATGGTAGTGGAAAGCAGCCGCGTGTGT
TCACCCACAGCAAGCAGGTGCTGACCGCCCACAGGTTGACACAGCAGTCCAGT
TCAGGGTCAGCAGACTCTTTAATGGGGACACCTAGCCCAGTACAAAAAACTCT
ACTCTGAGGGCAAACCCAGGAAAACCAAACCAGACTTGCTAGGATAGGGGTG
GCTTTTCAGTTGGTGGGGGGAGGGGGAGGAATGTTCCCAGGGCCTTCGGAGGG
TAGTGGGGGCCTCAGCATCGGGGGCATGGGTGTTGGGGGATGCACCCCAGGATT
TGAGGGGTGCACCCCAGGTGGCTGGGGATGGACCCCAGGAGCCGGAGGATGGA
CCCCAGGAGGAGGGGGGTGGACCCCAGGAGGCTGGGGGTGGATCCCAGGGGC
TGGTGGGTGGACCCCAGGAGCTGGTGGGTGGACCCCTGGAGCCTGGGGGTGAA
CTGCAGGAGTTGGGTGCACCCC

7:89,236,825

Total count: 38

A : 0

C : 29 (76%, 15+, 14-)

G : 0

T : 9 (24%, 4+, 5-)

N : 0

Promotor DHH REVERSE, 2 SNP

5:89570540-89571040

CCTTAAGTGGCCCCTGGCCCCGCCCCCGCCCTTCTCCCAGGACCGTCCCGCCC
CCTCCCACCGGGGCGGGGGCTCTAGCCGGCCACCACTGGTCCACTTCATTTCCA
TCCCGGAAGMCAGGCAGGCACCTGCCTCGGAAATTCTAGCAGCTTTAATCCTTG
GCTGCCTGGATAAGCATCCTTCTACCTCTAAGTTTATGCGTGGCACCAAACCATC
CTCCTCTGATACTTGAATTAGATCTTTGCTCTCCCCAAGCCTACCCTGATAGCGCG
TCCCGTCTAGGAGGTATGGGATCCAATTTCTGCCCAAGGCCAATAAAGCCCTTTG
GGCACACAACCTCCTTTCTCTGTGTCTCCCCAGCCTCCCCCACTTCCATCTCTC
CTCCTTAGCAGTAACTAGGACTGGAAGGGATGGGTACCAGAGAACCCTTTTCCC
TGGTAGCTTTGTAGTCTTCTGCTAGGAGCTTCCTCAGAATCAGGAACAGACCTTC
ATAGTGATA

5:89,570,657

Total count: 26

A : 14 (54%, 2+, 12-)

C : 12 (46%, 3+, 9-)

G : 0

T : 0

N : 0

Promotor DMRT1 Reverse, 2 SNP

8:43494587-43495087

TGGTGCCCCAAGGAGAAGCGCAGACTCTCCGGTAGCTGCAAGGGGGTACCCG
GCCGACGGCGAGGCTGGAGAGGAGGAGGCGCAGAACGCGTACGTTCTGCAGC
CGGAGGCGCAGCTGGACTGGCGAGGTCGGGACTCGCAACGCCAGAGACGTG
GGGGGTTGTGCCCTTTATTTGCGCGCGCGCGCGCGGCACAGAACTTCTGGAT
ACTTTTCAGAACGTTCCCGGGACTGCCTGGGCGGGCGAGAGCTCTAAGGAGCG
CCGTCACGCCACC^CCCCCCA^GTTCTAGCCACTCGGCTCCCGCTGCGTGCAAG
CTTGCAGGAGCTGCAAACACCGAGGGCAGTGCTGGAGGGGCTACTGCGAGCGCA
CACCTGGAGCAGGGGTGCTCCCCGGGGTGCACGGGCTGCCAGAACACGCTGTA
CTGAGGAAGCTGGGCTCCAGCTCAGCAAGGTAGCTGTGCAGGCTGCTGGGAGG
AGGTGCAGACCCCCCTCTGGAATC

8:43,494,865

Total count: 42

A : 29 (69%, 14+, 15-)

C : 13 (31%, 8+, 5-)

G : 0

T : 0

N : 0

8:43,494,873

Total count: 42

A : 15 (36%, 7+, 8-)

C : 0

G : 27 (64%, 13+, 14-)

T : 0

N : 0

Promotor NR5A1 Reverse, 1 SNP

11:94676678-94677178

ACCGGAGGCCCAATTGGTCTCTGCCCCACGTGACTCTGCAGGCCTCTCTCCTT
CTTTGTTGGTGTCTCTTCATTTAGGTCTATTTTTTTTTTTTTTTTTTTCTTCTCC
TAAAGAAAAAAAATACTCCTATCTATCTCGGGGCCGCGGATGGGGGCGGAG

GCCAAGGCACTCTGGAGGCCTTGGCCAGCTGGCTGTTCCAGGCCGCTGTGGCA
GTGCAGAGGCAGGGACCCACGTTAGGGCGGGTAGGCAGCCCCGCTTGTTAGCGA
CTGGGTGGGAGTGGGGCCTGATTTATGGGCAGCTCCCCACCCAGCCTGCAGCC
CGGCCTCTCTCCCTTGAATGGCTACCTCCCTGGGGCCTGGCCCAGCGGGGTCC
GGCCTGGCCAGACATGTGAGGGGAGTCAGGTTGGGCTGGCGTGGAGGCAGGA
TCATGGATGACTCGACCAGGTGGCCCTGCTGCTTTGGCCTGGTCTTTTTACTCTT
TCAGAAGATGAAG

11:94,677,114

Total count: 49

A : 0

C : 19 (39%, 7+, 12-)

G : 0

T : 30 (61%, 15+, 15-)

N : 0

Promotor SF1 Forward, SNP 0

29:8146080-8146580

GGCTCGGACACCGTTTTTAATCCTTCAATAATACTATTTTATAGATCTTCTTCCTCC
CTCTTTTTGTTTTTTTCAAAAACAGGAAGTCCCCTTTTACCTGTGTTGTGCGACGG
ATCCGGTTTACCGGTCCGCGCCAGCCCCTCCCCACCCCTCGGTTCCGGGTTACC
ATGGGACTCGAGGACTGACGTCACCAAGGGCTTCCGCGTCGGACCCGAGGGTC
GACGGGGAAGCCAGGGACAGAGACATGGCTTTGCCCCATCTATGCATGCGCGCT
CCTGTTCCGCTCCTCCCCGACCCCAATTCTTGTTCCGCCAATGCTTTTCCGCCGC
GACCTCTAGCTTAAACCCAGCGAAATTACTCCCTGGGGAAAGGGAGCAAGGGT
GGTGGGGGGGAAACAGAGACAGCCAATCCCAGGACATTACGACGCAACGGAG
ATTGATTGACTCCACCAGCTCAGCCAATGGGAGAGCTCTTGGCCCCATACGTCA
CAGAGTTTGCCCC

Promotor GATA4 Reverse, SNP 0

8:7531416-7531916

TCCCTCTCAGACTCTAGTCTTGTCTTCTGAGCGGGGAGGGCTGCCCTGTGGTAT
TTGGTTGGTTTGTGCAGTCATCTCTGAGGGCAGGAGTAATAATAACAGCAGTAC
AATTCTTCCCAGCATGGCAATTAATAAATAAGGTCTTCAAAGCATTTGCTCTG
TAGCATTCTTCTGGACTCCTCAGGATAGGATCAGGAAGGCAGATTACATAATAA
AGAGATAATTGAGACAACTGAGCTCAGAGAAGTTAGGAACATGCCTGTGGTCCA
GTCACACAGCAAGGAAGGGGATGGAGCCCATATAAGAACACATCAATTGACTCC
TATTTTGGGGGGCTCTAAAATCACTGCAGATGGTGATTGCAGCCATGAAATTA
AGACACTTGCTCCTTGGAAAGAAAAGTTATGACCAACCTAGACAGCATATTAAGA

AGCAGAGATGTTACTTTGCCAACAAAGGTCTGTCTAGTCAAAGCTATGGTTTTTC
CAGTGGTCA

Promotor FGF9 Reverse, SNP 0

12:35124500-35125000

CGGCGGCGGGAGCGAGGGGCGCCGCGGCAGGACCCGNNNNNNNNNNNNNNNNNN
NN
NN
GTTTAAGGTAGCGCCGCGCCGCCC GCGCTCCCCGCGGTCTAGCGCCCGCCGCG
CCCTCCGCGCTGCGGCAGGCCCGCGCCGCGCGCCGAGCGCGGGGACCCGGG
GGCGCCCTGAGCCCCAGTCTCACAAAGGAAGCGCGAGGCTGCGGGCCCCCGT
GCCACTGCGGCCGCGTCGCTCACACGGAGTCGCAGCCGCGAAGCTAACCCCTC
GTTTCGATGCGGCGGCGGAGGTGCAGACTGAATCGGGAGAAGTATTTCCACT
TGGGGCTCGGGGGCTGCTTTGAGTTAAGAAATAAACTTAGCTAAGAGTTGGAG
TGAAGGGGGCTGATTTAATGAGCTTGAA

Promotor WNT4 Forward, 0 SNP ZONA DE BAJA COBERTURA

2:130322119-130322619

CAGCGGCGGGGCTGGGGGAGCTGTGCCCGTCTGTCCCCAGGCTTGGTTCGGGGA
CCTGGCAGCCGGGACGCCGCTCCCTCGCCCGGCCAAGCCAGGCGACGCGCAGC
CAGGCGTGCCTAGAGCGGGCTCCGGCCCCAAGGACTCCCGGGCACCCGGCCGG
GGAGGGCCC GGGAGAAGCCAGTCCCGCGGGCCAGGGCGTCCACGGGCGCCGC
CGCTCTGGCCCCGCCCCGGGGGTTGGGGTGGGGGGGGTGTCCCGGGCCGCTGG
GCCCGCCAGGTAACCCCATCCTCGGCCCGCCCCGGCCCCGCCCCCCCCGGCCG
CCCGCCTCCGTCGCCGCCGCGCTGCCGCCGCATCCCGGCTCTGGGGCGGGCGCT
GACAGTCTGGTCCGCGCCGGGCAGCGGGCGCAGCAGCGGGNNNNNNNNNNNNNN
NN
NN

Promotor AR forward, 0 SNP

X:60923319-60923819

AATAATGCAGTTTGCAAACCTTAAAATATGCAAAGGCAACTTGGAAAAGCAAGTG
CCTGTATATAAGCAAATGTCTGCAAACCCTGGACAGAATTGAGGTCTCTGTGTA
CATGACAAGTATTTCTAGTATTCAGGTGTTTGTCTGCTCTTCTGAGTGATTTTCT
TTGTACATCTGGATGAGTGAGAAGTGTGTGCTTAGAAGTAACTCTAGACAGGAA
AAACGGACAAGAAGAGGGTAGAGATTACCTTTGGTTCCAGGCAGAGGGTTCC
TAGAGCAACTGATACCACCCACAAGGCCAATCTACCCCTATCTGAATCTGAAA
GGGTTCAACAAGTACAGGCTGGCTTGGCCATCATAGCTAGTTCCTCAGTTTGTAG
GAGACCTCCATTTGCACTTCTTGGTGGGCCTGCCCTGAACATAGTCCCTCACTG
AAGGAGATCCTCGTATTTCTTCTATACTTCTATCTCCCTTTCCCACTCCCTCCGCC
CCCACACG

Promotor INSL3 Reverse, 4 SNP DELESION

7:105140032-105140532

TGATGTGAGTGCCTGACATCCTTTGATTGCGGAGGCATTAGCTTCAACCATGGCT
CCCTGATAAATATGACTAAAGAGCCTGACCACCTCTTCCCACATTTGTTTTAGAC
ATCTTGACTTCAGTATCTTACCACCTGGGGCCACTTGGGCTTTTTTTGCTTTGTTTT
GTTTTGTTTGTCTTCTCTTCTTATGCTTTAAACTCCAACCCATGTTAAAGTCACC
AATRAACCTCTAGGCTCCCGAGCTTGACCCYAACAAAAGCAGGAACCCAGGCC
AACGCTGCTTTCTCTACGAGAACCTGGYTCCTAGTGTGCCGTGTAATTTATAAGT
AATACATCTTTATTTTTTCAAACCTTTCCTRATGGTTATTGCTGAAAGGAATCTTGC
AATCGTAATAAGAACTCCCAGGGCCAGTCTAACCACCACATTGATTATTGATAGG
CTGTGTGTGTGCATGCTAAGTCGCTTCAGTGGTGACCAACTCTTTGTGACCCCAT
GGACTA

7:105,140,263

Total count: 14

A : 0

C : 0

G : 14 (100%, 10+, 4-)

T : 0

N : 0

DEL: 16

INS: 0

7:105,140,271

Total count: 30

A : 14 (47%, 10+, 4-)

C : 0

G : 16 (53%, 12+, 4-)

T : 0

N : 0

7:105,140,298

Total count: 31

A : 0

C : 19 (61%, 15+, 4-)

G : 0

T : 12 (39%, 8+, 4-)

N : 0

7:105,140,348

Total count: 25

A : 0

C : 9 (36%, 6+, 3-)

G : 0

T : 16 (64%, 12+, 4-)

N : 0

7:105,140,405

Total count: 18

A : 9 (50%, 6+, 3-)

C : 0

G : 9 (50%, 6+, 3-)

T : 0

N : 0

Promotor STAR Reverse, 0 SNP

27:32831488-32831988

GAGCCTTAAATACCTCCAGCTGAAGGCTGTGTTTCATCATCGGGAGATAAAAAA
GCCATCACTCAGCGTGGAAAAGAAGGCACCAAGGATAGAGAGATTGCCTCACC
AGGAGTCTTTGGCCATTTGCGGGGAGCTGGGGTGGAGAGGGGAGGGTGCAGAAA
GGGGAAGGGAGGTTGATCCTGACCGGGATGGATGGAGGGGAGAGAAAAGGGA
GAAGCAGTGGTCAAGGCAATTTAGAAAAAAAGTGCGCACATGTGACATCGGTT
GGCCAGCAGCCTGCTGTTTAGAGTGTGGCTCTGCAGCTGCACCGCGCCCCACCC
CTGCCCCCCCCACCGCCACCACTCAGAAACTCCAGGTTTCAGTAGGTCCAGAA
TTGAGACTGTGAAAGCTGCATTTTAAAAACAATTCCAAAGTGATTGCCATGAA
GGTATTCTATGAACTGTACTCTAGGCTTTGAGAAACTCTGCCAGGTAGAGTGCT
CAGGGCATCTGCTGGGAGC

Promotor BMPR1B Reverse, 2 SNP, Inserciones y deleciones

6:30048065-30048565

CCCCGCAGTCCCGGGTCCCCGCCCCGTCTCGGGCGCCCCGCAGGCCCGCGCCCACT
CCGCGCCCCGCGCACGGCCGCGCCGTCAACTTCTGGCCGCCGTGGCCGCTCTGC
CGCCGCCTCGGGACTTTTTTTTTTTTTTCTCTCTCTAGCTCCTCTGCTGCCTCT
GGAATTTTTTTTTTTTTTCACTTGCCCTCTCCAGCTCCCCTAGTGATTGGAGCC
TGAGAGCCAAGTACTTAGCGGAGGGATTACACTTCTCGACGCACTTGGAGCTGC
CCCAGCGCCGCCGCTGTGTCTGGAAGGGCGAGCGGACTTGGGGAGCCGGCTG
CCTCCCGCCCTTCTACTGCCCCGCATCCCCTGAATCGAGGCGGGGCACTTCCCA
GCTCGGTCTGCTTCTCAGAGCCTCACCTCGGCTTCAATCACAGATGCTTTCTCGG
TCATGTGTAAGAAGGGGTTTTTWAAAAAAAAAAAAAAAAAAAAAAAMAAGTTTGAG
GAACAAAGGTGGG

6:30,048,523

Total count: 16

A : 5 (31%, 2+, 3-)

C : 1 (6%, 0+, 1-)

G : 1 (6%, 0+, 1-)

T : 9 (56%, 1+, 8-)

N : 0

DEL: 4

INS: 1

6:30,048,543

Total count: 14

A : 5 (36%, 1+, 4-)

C : 8 (57%, 0+, 8-)

G : 1 (7%, 0+, 1-)

T : 0

N : 0

DEL: 4

INS: 0

Promotor BMP7 Reverse, 0 SNP

13:24544100-24544600

AGGAGGAGGAGGAGGGGGAGGAGGACGGGCTTCCAAGGGCCCCTCCCGCGCC
CGCGGCCTCCCACCTGCCCTCGGCCCGCCCTCCCCCAGCGGGCGCCCAATGGG
TTCATTCATTCCTTCTAGTGCGCTCTACAAATATTTACTGAGTGCGCGCTGGGTGC
CCAGCGCCCGGCTGGGCGCCGCGGGGATGCGGAGAGGGGAATACGAGCCGGCC
CTGCCTTCTCCGGA CTGCTGTCCGGACAGGGTAGGAGGCCTGAGCGGGACCC
GTGGGATTTCGCGCTGCGGTGGAACAAGCTGGAGGAGATCGGAGGAAGCTCGGG
GATAAGGAAGGCTTCCTGGAGGAGGTGGCACTCGAGCCCTTCACCCTACTTGCC
CCTTCCATTTACTCCAGACACGCACATCCCTCCCTGAACTTGTTGCCAGTTTGCC
TTTGTACTTGCCAGTCTTTCTGCCTGAACTCTCTTCTTACTTGTCTCTGTCCCA
CCCCAGCCATCTGGC

Promotor SOX8 Reverse, 0 SNP inserción

25:41751640-41752140

CCACTGCCACTGGGGGCGGAGCTTGGCCGCCCCCGCCCCCTCCCCCACCTTA
AAGAAAGCGCCGCGATTCCCGCGGCGCCCCRCCCGCCCCGCCTGGCGCCTCA
CCACGTGGGGCCGGCGCGCCCGGCAGCCGACGATCGGAGGCCGGACTGTGCAT
CACGCCGTGGGCCCCCTTCCAGACGGGGAGGGAAGGGGAAGGGGGCAGCGG
CGGGGAGCACCGAGCGCTCGGGGCGCCCTGTCCCTGCCGGGGTGCTCGGCGGC
GCTCCCTCTGCTGGCGCGTCCCGGCCCTGGGCCAGCCCCAGCCCCCGCTGCC
CGCTGCGCGAGGAGGCGGGCCCTCAAAGCCTCCCCCGAGGCCTGCGTCGAG
CCCCGACGTCTTGCCACAGCCCAGAGGCGCCGGGGTCAACTGCCCCGCCAGCC
TGCGGCCAGGGCGGGGATCGGCTCCCCGCCGCAAGGCCGGCGCGAAGTGGA
GGAGCCTCCCGCGCGCCAGTCTG

25:41,751,991

Total count: 42

A : 0

C : 42 (100%, 21+, 21-)

G : 0

T : 0

N : 0

DEL: 0

INS: 38

Promotor FOXL2 Forward, 0 SNP

1:129604165-129604665

AAGTCACCCCTCAGCACTGGAGAAAGATCAGAACAAGGTCTTGTCCGGAGAG
AGATTTAAACAAATGCCTCCCTCACCGCCTGTTGTTTTTCTTCCCTAGGCTGTGAC

AGAATATGTACTACTGGCAGGCAGGCAGGCAGGATGAATTGAGAAAGAAAAGAA
AAGGAGGAGAAGAGAGAAGGAGTGAAGAAATAAAGGAGGGGAGGAGAAAAG
AAAAGATGAAAAAGAAGATGCAATATTCATGCGTCACATTTACCCTGATACATGA
TATACAAATGTCATTATGCATCTATAAAGTATAAACGTGTTTTACCCCATAAATATA
AATCTCACATCTTGTATCTGTGCATACCTGTGTTTTCTGCACACGCACATCCGAAC
AGCTATCTCACGTGTCACAAGGACAGACCCTGCCCATGATTTCTATTTGTAATAC
GAAGCACAGACTTAAACTATCCCCCAAAGCCCCACGACAACGTTTCGCTCCTGTG
TCGGAGCAGAAGC

Promotor RSPO1 Forward, 2 SNP inserción

3:108397833-108398366

GTATCTAGGCTTTGCTTCAAGATCTACCTGGCTATCCTGCACCAGCCGAGGGTCC
TCACCTGGGTTCCTTGGAGGTTATAGCCAGTTCTCTGAACTGGGAAGATGGTCT
GAAGAGTTGACTGCTGAGAAGAGGAGAGTGTGGGCGGGACCCAGACTCCCTC
GGAGCCTGTTCCCTTGTCACCTTTCCAGGTTCCCTGATGGGAAAAGTGAATTTGGT
AGGCTCACGGGCCTGTTCTGACCCAGGATGCCTGCAGCTGCGCCGGTGCTCTG
GCTGCTTGAATCGCCGGGGATGCAGGGTAGGGGAAGGAGAGGAAGCAGCACA
GAGGTTCTGCGCCGGAGTCCAGACCAAGGGTGCAGTTGCCAGCCCTGCGCTCC
GAGCGCAGCGCCCCAGCTGAGGGCAAGGGCGTGCGGGAGGGGGGCGACGAAC
TCCAGGCCTGGCGCTCCAGTCCGTTTTTTGCTGCGGATCCCGGGAAGGGGGGC
CGGCTCGGGGGTGGGACTGAAAAGGGGGGGATTCCCTCCCTCGTGCGCGCC

3:108,397,885

Total count: 16

A : 0

C : 0

G : 3 (19%, 3+, 0-)

T : 13 (81%, 6+, 7-)

N : 0

3:108,397,908

Total count: 19

A : 0

C : 0

G : 0

T : 19 (100%, 12+, 7-)

N : 0

DEL: 0

INS: 15

3:108,398,170

Total count: 30

A : 5 (17%, 2+, 3-)

C : 0

G : 25 (83%, 16+, 9-)

T : 0

N : 0

Promotor LIN28A Reverse, 0 SNP inserciones

2:126357987-126358487

TGGTAGTCGGCTGAGCCCGCGGCCCGGGCCCCTGCTTGGGCGGCTGCTGGCCC
CAGAGAAGTCCGGAGGCAAAGGGGTGGCTCGGGGAAGAGGCAGCTACATCTTC
CCCAGCACAATAGCGGTGGGAGGGCCCACGGCTTTTCAAAGGCTCCCAAATTCT
AAAAGACAATGACCCAACCCCCCGCGGGCAGCCCCCTCTCCTCCCTTCCCCTC
CCCTCCCTCGCCTTTCCCCTCCCTTTCCCTCCGGCTCCAGCTCTGGCCCTCCCC
ACCACGGCGCTCTCTGACACCTCTGGGGTGTCCCTTCTCAGAACCTAGAGGTTT
GACACCCCTCCACAGACACCACATCTGGAGATTGGGGCCGTCAACCCTACAA
GTCTTGAGTACCCGGGAATTTGGGATCCCGCACTTTAAGGACTCGGCGGGGGTC
CCCAAAGCAGCATAAGGTGGGGGGCATATGGCGGGGGGGGGTGCAGTTTTAA
AGCCACGTGACTGTTC

Promotor DHX37 Reverse, 0 SNP

17:21967823-21968323

TCTCGCGAGAGCTGGTACTAACAGATCTCCTGCGGGCGGGGCTAGAGGCGGGGT
CACCTTAAAACTAAGGCCGCTGGGGGCGGAGCGAGGCGGGGCCAAGTTAGGG
AGCGGCGGGGCCTGAGGTGCCCAAGAGTCTTCTGTTTCAGCCCCGGGCTGTTTG
CAGGAATGTATCCACTAACTGAATTATCTACTAATATTAATTTGGGAATGAGAGT
GTTTTGTGCGCTTTAAAAATATAACCTACTCCTAATACAGTCTTCTTCCCTCTTTT
TTGGCTTATCTGTACTTTCTGATATTCTTACAAGCAACATTATTTGTGTAGTAAAA
AAGGCGTTAAATATTTTCATTACAAAGACAGAAAAAGTAAAAGAAGGCATCAAT
TAGACAACTTTGCATTTTCATGACCACATCAAATTTTCTGCATTGCACTCGGAAA
TATTGTATTTTCTGAATTCTGTAATATTTTGTGAACAGAACAGCTATACTGTGTCT
TCACT

Promotor GDNF Forward, 1 SNP

20:36402036-36402536

GCCTTCTGCCCTGCAGAAAAGCCAGAGAGCTAGACATCGAGGTGGAAGGAAAG
CCCAGTGCAGCCCTCCACTCGACACAGCCCCTGCTCAGAGAGCTAGGCGCGAG
GGCGAAGCCGGGCGCGGGCGCCGCGGTCAAGTTCGGATTTCTCCCTTCGGTTGG
TCCGCGCAGATCTCCGCACATTCCTCCGGATCTTCCC GGCGAGGAGAAAGCGCG
AGCCGGGCCGCGTCTGCACGCGCTGAGCGCTCTCTCCCTGCACCCCGGGGAGG
GGCGCCTCGCGTCACCCACTCGCACCCGGAGCCCCCGCTTCGGGAGCTCGGG
CGCCTCCTCGCTGTTCTCCTTTCCCTCCCCGCCACCGCCGCCGCTCGACCCCTCC
CCTCCCGGGGCCCGCGCCTCCCTCCCCACCCCGGCCCGGGCCCGGGCTCT
CCAGGACCAGCCTGCGCTCCTGGCGCCCTCATGTCTTCGCSGGACTCTCGGCGC
CGGTTGACGTGGTGTCTC

20:36,402,505

Total count: 28

A : 0

C : 11 (39%, 1+, 10-)

G : 17 (61%, 3+, 14-)

T : 0

N : 0

Promotor KITLG Forward, 3 SNP

5:101873085-101873585

AAAAATTGGAGTGGGACAATGGCCTAACTATATAGATCCTAATTAAGCTTTAAAC
ATTTTTTTTCCCTTAAGCAGGACTAGGTGAATTCTTCGCTAGGCCCCGAGTGACC
CYTCCAGCCCCGCCTCTGCAGTAGAAAAGGAAYTGCCAGCCCTCGCCAAGCT
CAAGGTTTCTCTTGAGTCCCCGGCCGTGCCAGGCTAAGAGGCAGATCAGAGAC
TCTCCGCGCCCCGGCGCGCAGCGCGAGTGGCGGCTGCAGCGTGTTACCTTCATC
CTAGGCGCCCCCGCGCCCCAGTAGTCTCCAGCCTTGCACGCACCAGCCCCCA
GCGCTGGAACGCGCTTCGCTTGATCTGTCCAACCTTGGTGCTCCAGCCGCCCT
CCAGGGTCTGCCCCYCTGCCCCCTGCCCCCTGCCCCAGCTCAGGCTTGCTTCC
CCGGGGCTCCGGAAGAGAAGGAGGCGTGTCCGGAGTAGGCGGGCGGGAGCCG
TATAAAAGTGCTGGCG

5:101,873,196

Total count: 26

A : 0

C : 16 (62%, 10+, 6-)

G : 0

T : 10 (38%, 7+, 3-)

N : 0

5:101,873,227

Total count: 28

A : 0

C : 11 (39%, 9+, 2-)

G : 0

T : 17 (61%, 8+, 9-)

N : 0

5:101,873,478

Total count: 46

A : 0

C : 22 (48%, 13+, 9-)

G : 0

T : 24 (52%, 16+, 8-)

N : 0

Promotor NR0B1 Reverse, 0 SNP

X:29521418-29521918

TGGCCGCCGCCTGCGATCTATTTATAACCGAGCGCGCACGCACGCGCGTCTGCCGT
CTCCGCCCCGGGCAAAGGCGCAGAGCGGGGCGCGGCGCTGGGTGTGTTTCGCTG
TGACCTCGGCGGTTTCAGAGGGGGCAGATGCACCTCACAGGCTGAAAATGGAAG
AGGAGAAGAGGCGTGGGCGCTCCTGGACACTTGCCCCCTTCTCTCATTACACC
CTTCCCCGCCTCTGGAAGACAGCTGAGCGCAGGGAGCAGGTATTGGGGGCACG
CTTCCAACCTTTCCATTCAACTCTGGCGTCTCATTGACTCCCTTTACTGGGAGG
ACAGGGTTACCAAAAAGGGGAAAAATCTATTTCCATGCATTCTTTGCAAACCTTAC
ATTAAATGACCAAACTTTGCAGGACTTACATTTTGTGTTTATGGATAGGGAGGTCTC
ATTTTCAGGGACTTGGA AAAAATACAGACCATGGACCAGCAGTATCAGCGTCGAA
GGGGAACCTTGGTAG

Promotor HOXA13 Reverse, 2 SNP

4:50869777-50870277

CCGGGGCCCCGAGCGAGGGGGGCGGATCGCGCCCCGCGGGGTCGCGCCAGGCG
GCCGCCATTGGCCCCGGCCCCCTTCTCCCGCTCCGCCCACGGCGTATGCAA
AGCGGGCGGCTCCAAGCCCGGCTCTGCCCTGTACACTCGCCGTCCCCACCGCCG

CCCGCGCCGTCCTCAGCGCCAGCGCCCAGCGCGGGCCGCGCACCATTCACCC
AGGGGAGAGGCGGGGGGTGCGGTAGGRTGGGGGCGAAGGACATGGCGGGCGG
GGAGGGGAGGCAACGGCGACCTCCTCGCAGTTCGCTTTCCTTCCCGTCTCCCA
GTGGGGCTCGGAGCGGCGTACGGCGGGGAGGGGACAGGGCGAGATGTTGGGT
GACGACCTGAGGCGGTGGGGACAGGTCAGGTAATCTGCGGGCATCTGGGGAC
GRTAAAGTATCGCGCCGTAGACCAGGCTGGGTGTTTCCTGGGGCCTCTGGCGCC
GTTTTCTTTACAGGTATCCGCAC

4:50,870,016

Total count: 51

A : 32 (63%, 22+, 10-)

C : 0

G : 19 (37%, 10+, 9-)

T : 0

N : 0

4:50,870,202

Total count: 45

A : 28 (62%, 14+, 14-)

C : 0

G : 17 (38%, 8+, 9-)

T : 0

N : 0

Promotor HOXD13 Reverse, 0 SNP

2:20653814-20654314

TGGCCCGGCCCGGCCCGGCCCGGCCCGGCCCGGCCCGTGCAGGACACCATGGCGC
TGCGCGCCTCCTCCCTCTCCTTTCTCTCCTGTTCTCTCGCTCCCGCCCTCTTCCTC
TCGCCCTCTCTCCCTCTGAGAGCCTCCCGCCTCCCGCCCGCCCGCCCTCCAACA
GGTTAGCTCATCGCGGGACGTTTATAAAAACGAAGTTCAGGTTGGGAGGGGGCC
TGGGCCGGTTCGGGGGGCCGCTCCTCCCGAGGGGCTCCCGCTCGGGGCCGTG
CCATTGGCTGCGCGGGGCCACGTGGGAATGGGGGGCGCAGGAGAGCCTGGCTC
CCGGCCGGGGCCCGGGACCCACCCACCCAGGCCCTACCCCTCCCGAGCTCTTG
TGCAGCCCACCGCCCTTTCCGCCCGCCCCGGACTCAGGCGTTTGCGGCGCAG
CCACCCACAGAGCTGATTGCGCGACCGCCCATCCTGGGCCCTGTCTGCGACCG
AGGCGGGCGCCGAGGC

Promotor NPR2 Forward, 0 SNP

8:59719971-59720417

GAGGACCAGTGAGGATACCAAATACGTGGGGGTTCCAGACTTCTTCCTGAGGCT
GGAGTGTCTGAGGGACTCGGGGAAATTGAGAAAGGAGACCCTAAGAAGAGCG
GGATGTGCGAGGGCCGTGTAGAGAGGCCCTGGCTCCTGGGAGTGACATGGACA
GCGCGCGCTGGGGTGGCCCCGGGGGGCCCCGGAGGAGACCGGGCAGGCCTCAA
GTGAGGGGACGCCCTGAACCTCGCCGGCCTGGGAGGCCCTTGCGCGGCGCCCC
CTGGGTGGGTGTGAGACCTGGGAGGTCCCCGGGCGGCCGGGTAGGGGTGGGG
GGGGTCCGGGGGGCGGGTTGGGGGAGACAGCAGGCGCCGGAGGGTGGGGCC
GGGCGGGGGAGAAGGAGGGGCCGCGGGGAGGGGGCGGGGAAGGCGCGGGGC
GGGGCGGGCGGCTTGCCCCGGGGAGTC

Promotor TSHR Forward, 3 SNP

10:86073405-86073905

TCGGCGCGCGCCCYGCGGGACCCGCGAGGATCCTGCGCGAGAGGCGCGCCCCG
GCGGCATCGCGGGCTGGCCGGCCACGCGTGCCTGCCTCGGACCCTCGGGCAGA
GGCGCCCTGGGCCAGRGAGAGCTGAAGTTCTGCGGGACCCGGGTCTCCCCAG
AAGGACAGTCCGTTCCACTGGAACCTTTGTCAGTTTAGAGAGGGTTCGTGCGCGT
GGATCCGGAGAGGCAGTTCCCTGGGGACCGCGCCCCACACGGGAAAATGGGGT
GGCCAGTTGGGTTTAGGGACCAGCAAAGGAGGGAAAATCCAAACCAGGCTTTT
TGGAGGAAGGCGAGGCGAAGAGCGCGTGGGGGCAGGTTGGAGGGCAGAGGGA
GGCAGGGAACAGACGAGGCWGGGGGCGCGGAGAGCGAAGCCGGGGAGCTGG
TTTGGGCGCAGGGTTGCCAGGGCGACGGAGCCCTTAAGTGCCTCTTCGGCGCCC
TCTCCAGCCTCCGGCTTGGTGCTGA

10:86,073,418

Total count: 13

A : 0

C : 7 (54%, 6+, 1-)

G : 0

T : 6 (46%, 3+, 3-)

N : 0

10:86,073,460

Total count: 16

A : 0

C : 3 (19%, 3+, 0-)

G : 13 (81%, 9+, 4-)

T : 0

N : 0

10:86,073,795

Total count: 52

A : 26 (50%, 13+, 13-)

C : 0

G : 0

T : 26 (50%, 14+, 12-)

N : 0

Promotor SHH Forward, 2 SNP

4:2398623-2399177

GYTCATCTCCATTCTACTTTCAGGGCATTAAAAATAATGCATTAAGYGAAGCACATAAAAGAGCAGCAGGTTTCGCGTTGTTTTAAGGTGTCAGAAGCTCCTCAAACAGCACCACATGGTGTGTGATGTGCGTCCTGACCAGTTGTAGCGACTGGAACCTTCAGGAGCAGAGGACGCCCCCCCACCCCTGTCTTCAACTGCAGGGAGACCTGGCCTGCATGATAAAGTCCCTGGGAAAACATTTAAATAAGACCTGGGCAGCTCTGCCCAACAATTTGTGAGACTATTTGTTTGGTGTGGAAGCTTGAGGGTGGGGGACACTGAGTCTAGATTGTCCTTTAAAACTTAAGTTGGTTTTAACTGAAGCATCTACCATTCTGGAGGAAGGGAAGGGGGAATGGGAGGTGTGTGCAGGGCAGGGGTAAGTGGTTATCCTCATCCGCCTGTCTCCTCCCTCCCTCTCACCTTTGTTTCGGTGAAGATGTTTTCTCTTTAACTAGAAGCCTTCAGGTAAAAATAAAGCCACAGCAGCAACA
GAGGGGGAAAAAA

4:2,398,624

Total count: 50

A : 0

C : 29 (58%, 8+, 21-)

G : 0

T : 21 (42%, 11+, 10-)

N : 0

4:2,398,669

Total count: 46

A : 0

C : 17 (37%, 9+, 8-)

G : 0

T : 29 (63%, 7+, 22-)

N : 0

Promotor VCAN Reverse, 2 SNP

7:27297943-27298443

CGCGCTCCCCATTCAGCGGCTCACTAAGGAACATCGCGCGGTGCGCGAGGAAA
CCGCTGCCCTCCCACCCTTCCCCACCCCTCTTCCCCGCCCGCGCTGCCAGT
GCTGGCTTAGGGGAAAGGAGCCCCCAGGCTCTTGTGGGGGCAGGCCCGYAGGA
GACCATTGAGTACCGTCGGTTCTTCTGGGGAGCAAACGAAACTCTGTAAAAATT
AGCCCAGAACTTGGTTACAGCGTGTTTACGCGGCCACCGAGCCTGCCTGTCCCA
TCTGAGGCAAGTGTGTCAGGGTCCTGGCTTCTGCCAACCTGAAAGAGACTGAG
ACAAGGGGACCCTTCTGAGACCTAGAGGGGAAGTATAAGAGTCCCCCCTGC
CTTTCCTGGAGCTACCCAATGGGGAGCCCAGGGTCATTGAGCAATCTACAAAG
ACCCTGCTAATAACGGGGCTGGACAGGAAATTCCCCGAGGCAAATCCCTTGTC
GACTCAAACAGATCCTCT

7:27,297,979

Total count: 47

A : 1 (2%, 0+, 1-)

C : 46 (98%, 25+, 21-)

G : 0

T : 0

N : 0

7:27,298,099

Total count: 30

A : 0

C : 14 (47%, 6+, 8-)

G : 0

T : 16 (53%, 4+, 12-)

N : 0

Promotor ST6GALNAC3 Reverse, 0 SNP

3:68868135-68868635

GGGTCGTGGGCCCGCCCCGGTCCCGTCCACTGGCTAGAGGCCTGCGAGGCC
CGCCCCAGATCACGTGGCGTCCCTGGCGCCTGCGGCTGCCTCTTGGTGCTTGC
TACTTTTTCTTTTCTGTTTTTTTCTGTAACTTCTGTCTGTTTCATCGTATATAATGTC
GCTCAGCAGCAGGCTGGGAGCTCAGATGGGTCCCGCTGGGGAGAGAAAGTGGC
CTTTTCTTCTCCTCGATACGGTCTTCGCTAACAGATCAGAGAACTCATAGCAGAC
CCTTCACACTTTTAAAGAAGTTTAGTGGGTTTGGAAATCATCTCTCTCCAGGCTTT
GGGTACATCAAAGGATTCTTCAAAGTAGCAAATTCTCCCTAAGCTGGTCAAG
GAAAGAGCCTTCATTCTACTTTAAAACCTGTGATGGCCTTATCTAAAATTAATTT
GCCATTAAGGGAGCACAAATGTCAATCAAGGAAAGATGCAACCAACTGGAG
CCTATGTAGG

Promotor ZFX Reverse, 0 SNP

X:22012094-22012594

ACTCTAGTGGAGTGTTGCCTGTAGACAAGGTCTACACACACACATACATGGACA
CGAGGCTTAAATCACACAGTTAATAAATCCCCAACACGGTACTAGATGGAAGTA
ATGTGACTCCTTCAGTAGTTCATCACTTCTAGGCCCGATGAAAGTACCACTGTTA
TACCTACATATAGCATCTGTACCTGCTCAGACTTCAGAATCTTTTTCATGGCCTCT
GATGGAAATTCTTAGTCAACTAAGTTGGAGGTCAAAGTAAAAAAATCAAGAAT
TATTTTCTTGATTTTTCTATTCTCTTGGTCTCAGGTTACTTGTGTTGCTGATACT
GGTGAACACAAAGGATTTGGCGTTGTAGTGATGTGCTGATACCATAGAGCCACA
AGGGAAGTTCACCGCAGAAAACCTACATAGTACTTCTGGATGGTCTTTGTTCACT
GATGATGTGAATTACTCAGAAATAGCTAAACCCATTGACAAAAATGGAATAGTTA
GCTAGAC

Promotor SCYL1 Reverse, 1 SNP

29:7460759-7461259

GAGGGCGGGGCATAACCGGATGGGGCGTGGTTTTGGTTCGGTGGGCGTGGTTCGGC
GGGCGGAGTAGGAGTTCGGAGGGTGACTGGGAGACCAACCTTTGGCGCAACTGC
TCGGGCCAGCCAGTTACCAGGTCTGCCCTCTGTCAGGTCCCCTAAACTCTCA
GCCCCTCTGTGTCCTTATGTCTAACATGTGGATGGTAATAGAGTCCACCTCCCAG
CGTTATATAAGGATGAGACCTTGAGAAGAAACAGAGGATAGGGAAACCGAGGC
AAGGAAGCAGAGAGAGACAAATGGAAGAGGAAGTCGATAGAAAGATATGA
AAGGATGCAGTGTTTCAGTGGGAAAAAACTTGGGGAGGGCAACTGTCCCCAAGC
CAGACTCTTGCACCCACCTGCCGGTGGGCATCTCRAGGATCCAGTGAGGCATCG
TGTTGGTGGAATGATGGAGTGACCAGGGGAGAGAGGCATAAGGAAGCAGAACC
TCTGAAAAGGAGTGTGTTTGG

29:7,461,166

Total count: 24

A : 11 (46%, 2+, 9-)

C : 0

G : 13 (54%, 5+, 8-)

T : 0

N : 0

Promotor SUV39H2 Reverse, 0 SNP

13:53841973-53842473

GACGTCACGGCGGCCGTCCCAGCCGCGGGCGGCGAGTGCGCCTGCGCCCCACGT
CTTTCGCGGGGACCGCGCGGACAGGGGCGGGGCAAGCGGTTCGGAATCTGGGAG
CGCTCGCTTAGGTGAGCGGCCACCTGCCCTGGCCTGGTTGGCTGACCGCCTAGT
TCAGGGAACGGGCATCAGTCAGGCTTTCCTACAGTAATTATTTCTTCTGCCTGGG
CGCTGGGTGTGCAATGTGCAGAATTCCAAGCGCAATGTACGTTTTTTCCCCTCAT
AATTGTTCCCTCAGCCACCTGAGCCCAACAAACCCTTGTTTCCTTCTAGGCTCTGC
CTCTAGATCACACGTTCCCAAAATTGGCTATACATGGGGACCCCTTGGAGGTTTT
GTTTTTTGTTTCACTCTCGGAGATTCAATAGGAATGGGGTGTAACGGGGACGTTG
GAATTTTTAAAGCTCCCCAGGTGATTCTCAGTGTGCAATTTGAAACCACTGGTCT
AGATCAGTGCT

Promotor NR0B2 Forward, 1 SNP

2:125945732-125946232

ACTGACAGTGTARTTTGTACATGTGGAAGGGACTGGTTCATCTCCAGAGTCCCC
CGCCTGTCAGAGGAGCCCAAGAGGAAGGAACACTACAGTGACACAGAAGCCAGA
ACTCAGGAAACTGGAGTTTTGACTTTTCAGGGTGGGACGGTGATTTCAATTTCTG
GCGGTGAGATTTATTTTACATGGATCTGATCCAGGAGTTAGTATCAGTTCAGGAC
CCCACACATCCTTGCCTTTATATCAAGGGGTAGGAGTATCCCTCCCTGTTCCCTCA
AATCCCCTGCTGATCCCTCCCTCTGCTCCTGCCCCAGCCTCCGTCTCACCTCACT
GAGAATCACCAGTAAGGAAAATGAGGCAGCCATTTCCAAATTGAAACAGTTTA
CGGGAATCTCTGCCATTTGGGATCATTCACTTCCCCTATGGCATCACTGATTCAAT
GGACATGAGTTTGAATAAACTCCGGGAGTTGATGATTGTCAGGGAGGCCTGGCA
TGCTGCAGTCCA

2:125,943,432

Total count: 34

A : 0

C : 0

G : 13 (38%, 6+, 7-)

T : 21 (62%, 9+, 12-)

N : 0

Promotor PPARGC1B Reverse, 1 SNP

7:49729916-49730416

GGGGAGGGAGGGAGCGAGCGAGCGAGGGAGGC GGGAGGAGGGAGGGCGGCC
GGCTGGAGGAGGGAGGGCGGAGCTCAGGCCCGCTGCCGCAGGGCCGCTGG
CCGCGGGGGCGGGGCCGAGGGCGCCCGCGCAAGCCGGGGGTTCGCACCCCC
CCTTCCCTGCGCAATGTGTGGCGCCGGGATCCTCGCCCGCGGCCCGGCCCGG
GAGGACAGCGCCCGCAGCCGGGTGACGGTAGTCAGCCAGCAGCCCGATGCCTG
CGCAGCAATGCAGGCAGCCACTGCTCCTGCCGACCGAATCACGTTGCGTTAGC
GCTGGGCGGGTTCCTTACGAGACAACCTGCTTCGGCACAGCTGGGGAAACTGAG
GCCTCAGAAGGCAGAGGACCTCGTTTGATGCCACGATATAGTTTAATACMGAA
AACAAAGCCCAGGTCTGACTGCCCTACAGGCTTGAGTGTCTCGCTGGGCTGCAG
CCAGAGAGGGAGGGATAACCATAGG

7:49,729,970

Total count: 20

A : 0

C : 0

G : 4 (20%, 0+, 4-)

T : 16 (80%, 6+, 10-)

N : 0

7:49,730,334

Total count: 23

A : 14 (61%, 4+, 10-)

C : 9 (39%, 3+, 6-)

G : 0

T : 0

N : 0

Promotor PPARGC1A Reverse, 1 SNP REVISAR ESTE INSERCIONES, MUY LOCO

6:44275816-44276316

ATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGCGCGCGCGCGCGCGCGTGTGGCTGG
GTGTGCGTCTGTTTGGGGAGCTCACCGGAGAGCCGGGGCCGTCACGTGGGCGC
GCTGACTCCGCCGGCTGCCGGGGACAGCCTGTACTACAGCCCCGGCCACTAAAT

CAGCCCGCGCCGCCAGACCTTTGCAGCCCCACCACGGCCAGCGGCCAGCCCTT
CCCGCTGGGCCGTGCGGGCCCCGGGACAGCAGGGGGCGGCGGGTAGGTGGGTG
TTAGGGAGGGGTCGCCCCAAGCCTGTACAAGAAAAGAAAAGATGCCGGCGAG
GAGGCACATGTCCCCCGCTATGCCCTCACCTCCTGTCCAGCCTTCCTCCCAGC
CTCTCTGAAGATTTTTTATTTTAATTCCTAAAATTGCTTTCCTTGCARAGACCAC
TCGTACAGCCACGGGGAAATTATTTTCATATAGTTGCTACGTCTCGATTTTTTTT
TCCCCCTTCCTGG

6:44,276,071

Total count: 35

A : 9 (26%, 5+, 4-)

C : 0

G : 26 (74%, 12+, 14-)

T : 0

N : 0

Promotor INHA Forward, 0 SNP, incersion (TGTG)

2:107401933-107402433

ATGACACAGCTGGAGAACAAGAGCCCAGACCAGCTCCTCCAGGCTAAGTTTAG
AGCAGGCGGGACCCCTGCCCCCCGCCCTAACCCAGTTCTAGCCCCCGCCCCG
CCCTTCCCCCTAGGACTGGCCAGCAGCTGCTGGGTGAAAAGGGCCCCAGGA
GGTTCGAGGGGCTGGCTTGCTCTGTCTCCCTGACAAATAACGCTTTTTAGACCTG
GCAGACCCCCAGTTAACAGGCTCCTGTCCCATCTGGTGTACCTCTGTGCTGGG
TTGTGACACTGTGTGACTCTGTGTGGAGAGCGAGGGTTTGTATGTGTGGTTAG
GTCACCTGGGGTGAAAGCCCTCTCCAGCCCCTCCCCACATTCCTGGCGGGAGT
GGGAGATAAGGCTCAGGGCCACAGACATCTGCGTCAGAGATAGGAGGTCTCAAT
GCCATGGGCAGGGGCAACTCGACTGCGGGGCGTGGGAAGGGCTGGGGAAGAC
TGGGGTGAGAAGGGTAGA

Promotor ESR1 Forward, 2 SNP, inserción (A)

9:89026619-89027119

ACCTCAGCAGGACACTGAAGTCAAGAACCTAACTGATCAGGGATCAGTAGTGC
AGAGCTGTGCAACCAATGTTGAATGAGAAAGTTACCAAAACGCTCACTGAACAT
GCATCCTCACTCCTGTTCTGAGCTGTAACAAAATTTATGTGTCCAATGAATGCTT
GATTATTATTTTTCCAACCCAAAATGCCTGTCTAGACTTTAACCTTTATTAGTAGT
GAAGAGAAAGTGAGCTGGTATTCATTAATAAAAAAAAAAAAAAATTCAGGCAGATTA
ACAGATGACTTATACCCTTGTGAAATGTCTGTCTTGACCCAAGTGCTAGGACAGT
GAGAATTAGGCCTGGTGTGGAGAAAGAAAGGCCACCCCTCCTCTATTTTGTAC
AGAAGACTTTTCCACTCCTAGTCAAATGGTGGTGCTAGTTCTTTAGTTTTGAGTT

TCTGCATTTTCCTAATTTTCATGGTCATAACAGCCTCTTGTCTACTGCCTCAGAACGG
ATTTACCAA

9:89,026,881

Total count: 10

A : 0

C : 0

G : 10 (100%, 7+, 3-)

T : 0

N : 0

9:89,026,882

Total count: 10

A : 0

C : 0

G : 10 (100%, 7+, 3-)

T : 0

N : 0

Promotor ESR2 Reverse, 0 SNP

10:70176467-70176967

AACCAGGAACTCGCAGGGCTCGGGGATGGCTACAGGGTCTTCCTATGAGTGGCA
GGCTTCCCCACCCCTAGTCAGGGCCGCCAGTCTGTATCAGCTGCTCCAGCGAC
TTTGCAGGGCATTACTGATTCATGCTAACCACCTGGCCATGACCTTGAAAGGCTG
TTCCCTGGTAGCATCAAAAGAATGAGTGAAGCTAGCAACCCGTGCCTTTCCTTT
GGGGATGGACACTTGAGGCAGGTGGCCTGGGGCCTGGAGTTGTGGCACTGACG
GTCCCCGCCTGCTGCAGGCCTTCCAGCGGCAGATCCACGAGAGGCTGACACAG
CTGGAGCTCATCAACAAGCAGTACCGGCGGCTGGCCCGCGAGAACCGCACCGA
CACGGCCAGCAAACCTGAAGCAGATGGTGCATGAGGGCAACCAGCGATGGGACA
ACCTCCAGAAGCGGGTCACGGCCATCCTGCGGAGACTCAGAGTAACCCCTCTA
CGTCACCGGGTCACTTGT

Promotor LHX1 Forward, 0 SNP

19:14354553-14355047

TCCCCTCTTCGCCCCTAAAGACACGCGCGGTGCCCGGGGCAAACCTTCTAGGCCA
AGAAAGCAAGGGTGGCAGTGGGGAGGGACCCAGCACCAGCTAAATTGCAAAG

CCAAACAGTGCACCTGGGCCGCCGAGGCTCCCGAAGCCAGCTGCACCCCAACC
TCCAACAAGGCTCGATCTTGGGTACCACCCACCCTCAGGGCAGAAGTCTGCCCT
CTGCCTGCTCCCCTCACGCGCTCTCTCAGTCTCTCCTACCGCAAGCGACGCCTT
ACCGGAGCAGGAGGGGACCCGGGCACCTCGTTGCCCGCCGCCGCACAGCGCA
GGGCCGCGGTGGCAGTCGCCACTGATCCTCGAAACGCGGTCTCCCGGCACTCTC
CCCAGCCGGGAGATGCAGGATGGTTTACAGAGGGACCGCGAGCCGCTGATTGG
TCGTAGGCCGCCGTGACGTCGGCGGGCGCTGCATTAAGGCAAGGGGGCTTCCA
GAGCCCAGCCAACA

Promotor LHX9 forward, 5 SNP

16:76115266-76115766

GGCGTCCGGTCCCCTCTCCCGGGAAGGCCCGGCCCTGGGCTGTTCGCCAGCA
GGTGGATTGCTAGCACACTCCCCGCTCCTCAAAAGCCACACCGACCCCATGGAT
TTTGCAGAGCCAGGAAGGGAGGGGCTTTTATTCCACCACCCCCACAATCCCGT
GCAACTTGGGGCTCCCACACCGGTCTCGTTGTGTTTGGACCAGAAGGGGGCCCG
AGAAAGAGGGGTGCTCCCCGGGCGCAGCGGGGGTCTTTGTCCCTCGCGGTGCG
CGGTGTCCTAAGGCGACCTCGGGAGTGTCCGGCCCGCCGGGTCCACCGCCGG
AAGCCAGCGGGGGTCTCCGAACAAGTCTGGAGAAGGGGGCCACGACCTGG
CGAATGGCCATGGGCATGTCGCCTTTCCTGAGCTCTCTGAAGCCTCGCGGCCCC
CCCCCCCCCCCCGCCAAAGGAACGCCCCCGCCCCCGCGCCTCCACCGCGTG
GGAATACCTGCCTTTTTATCTT

16:76,115,269

Total count: 51

A : 0

C : 0

G : 51 (100%, 30+, 21-)

T : 0

N : 0

16:76,115,346

Total count: 57

A : 1 (2%, 1+, 0-)

C : 44 (77%, 24+, 20-)

G : 0

T : 12 (21%, 6+, 6-)

N : 0

16:76,115,410

Total count: 61

A : 60 (98%, 29+, 31-)

C : 1 (2%, 1+, 0-)

G : 0

T : 0

N : 0

16:76,115,417

Total count: 62

A : 60 (97%, 28+, 32-)

C : 2 (3%, 1+, 1-)

G : 0

T : 0

N : 0

16:76,115,479

Total count: 60

A : 0

C : 0

G : 60 (100%, 27+, 33-)

T : 0

N : 0

Promotor NR2E1 Reverse, 0 SNP

9:42054756-42055256

GAGGGGAATAGGGCGTCCCTGGCCCACTTAGCTTTTCCCCCAACTCCTGGCGGG
GTCTGACGTCAGCCATGTGCGGGGAGGGGATGGAAAGAGGGAGGGGGTTAAAT
GCTAATGATATTAATGAACCTCCAAGCGGCTCCCAAAGAAAATGCAGGCGCTCT
CGGAGCTGAGGAGTTAAGTGTGAATATGGAAGTGTGGCTCTATGCGGGTGCTTC
GGTGAAGATGGTGCTGCTCTTGTAGTAAAAAATGAATTATTATTATTATTCATG
GCAAGGGGGGAAGGGGAGGGGAGCCGGAGCTTTCTCAAACGCTTTCCTCCTTC
TCTCCAGAGGGCCAGACAGATTCGTGGAAGAAGTGGGTGGCTGTGTGTTTGTGT
GTGATTATGCACGCCGATATGGCCATGTGAGTTGGTTCATTCTTGGTCCCGTGC

CCCTTCTGTTGGGTAAAACCTTGGATCTGGTCCGAGGTGAGTAATTATTCATTTTG
CAACTATCTACGG

Promotor BMP2 Reverse, 0 SNP

13:34219666-34220166

GTCCCCAGTAATCCGCGAGGCGCTCGCCCCGAGGTAGTTCGGTGGGCGGCGGA
GCCTGCGGCGGCTGATGTCTGGCGGCAGCTGCCAATCCCGGGTAGGGTGTGGGA
AGCAGAGCGGCGGGCGCAGCGCGAGCCGGGCGCAGCGCGGCGCGGCGGGGCG
AGGACTCTGGCGGCGACGGCGGCGGTGGCGGCGCCGTGGCGCGGCGCTCGCGG
CTTTTAAAGGGGACGCCGCTGCCGTCTCCCTCCCGGCCAGGCCGAACACCCT
CCCCCTCGGTGGCGCGGCTCGCCGGGGATCCCCGAGCGGGCGGGAGCAGTGTG
CAGGGGTGTGGACGGCTAGCCGGGCAGCCGGGGCAGCCGCGGCAGCCGCGGT
GGGGTGGGGCCGAGGGCGGGGACCCGCGGCCGCCGGGGGGGCGCTCGTGCCT
CCAGCCCCTGCCCTCAAAGGGGAGATCCGTTCGGAGCGCCTGGCCCTGGCTGGG
ACTCCCAGGACGAAATCCCGACGAA

Promotor IHH Reverse, 0 SNP

2:106908095-106908595

CGGCGGCGGGGGGCGGCGGGCGGCGGGGCTNNNNNNNNNNNNNNNCTGGGCTGG
GCTGGCCGGGCCGGCCGGCTGGCGGGCCCCGCGGTTAGCACCCCGGCCCCGCG
GTCAGGCGGCTGGGGCGGAGCGGGAGCTGCTGCCGTCTGCGGGCGCAGCCCGGG
GCCGAGTGAGAGGGGAAATGGAAGAGATCCGGGCTCGGGCCCCGCGCAGACC
GCACCCTACCCATGTCCCTGCCTCCTGCGCGCTCGACAGCAAACCTGCGGCAAG
GGCAGCGCAGCCTCCTCCCCCTCGGGCGGGCGGCCCCCGGCACTAGCCAGCCCT
CGTTCCGCTCGCTCCTCCGTTCGTGCGTCTGCCCGCCCCCTGCCCTCTGCGCCCCC
GCACTGCCTGAGTGTGCTCTCCCCGCCCGGACGCGCCCCACCCGGCCTTGGCCT
CGCCTCTGGGCTCCCCGCGGCTCCGGGGTGCCCCGCCAGGCGCAAACCTCCAG
TACAGGAGCTGCCGCCCCACG

Promotor GLI2 forward, 1 SNP

2:72413413-72413913

TGGTGGCTGCCGGAGAGTCGGCGTAGAACCAGCCCCCCAAAGCCTGCCTCCC
TCCCCGCCAGCCCTCCAGTCCCCCGCTTCCGCCCGGCGCCCGGAGAAGCGGG
CGCACTGGGAACGCCGACCCGGGCATCTCCCGGCGGAGGGGAAGAGGGAGGT
GGGGAGGGCGGGGATTTCAAGATTGAAAACAGAACCGTCCCAGCGCCTCGG
CTCCGGAGCTCATCTGACTTGAGTTAGCGACCCCCACCCACCCCGGCGCCTTA
AAAAAAAGTGTGGGGACTGGCGCGCTTTTCGTTCTCTGCTGGAACCTTCTTC
GTAGGTGTGCTTTCTCTCTAGGGCGCTGAGGAGGGTCCCTGGGCGGCCCTCCCC
TCCAGGTCCCCGGGATCCCCTCCGGGAGGGGGCGCGCGGCTCGGGCGGGGGCG
CGGCGCCCTGTGTGCCGCAGCCGTGCGCGCGGGGGGCGCTGCGCCGTGCGGGTG
CGCGGCGGGCTGGAGCGCGGGA

