Supplementary table 8: Complete sequence and structure of snoRNAs in the SNORD116 cluster are listed.

Probe set	Transcript Name	Transcript ID	SNOG	Expression	Sequence (5'-C box-ASE 2-C' box-D' box-ASE 1-D box-3')	ASE 1 3'-5'	ASE 2 3'-5'
HBII-85-24_x_st	SNORD116-24-201	ENST00000384549	SNOG2	High in ERG-related group	GGATCGATGATGACTTTTATACATGCATTCCTTGGAAAGCTGAACAAAATGAGTGAAAACTCTATACCGTCATCTTCGTTGAACTGAGGTCC	AAGTTGCTTCTACTGCCATATCTCAAAA	GAAAAGGTTCCTTACGTACATATTTTC
HBII-85-21_x_st	SNORD116-20-201	ENST00000384507	SNOG2	High in ERG-related group	GGATCGATGATGACTTCCACATATACATTCCTTGGAAAGCTGAACAAAATGAGTGAAAACTCTATACCGTCATCCTCGTCGAACTGAGGTCC	AAGCTGCTCCTACTGCCATATCTCAAAA	GAAAAGGTTCCTTACATATACAACCTTC
HBII-85-20_x_st	SNORD116-20-202	ENST00000384529	SNOG2	High in ERG-related group	GGATCGATGATGACTTCCATATATACATTCCTTGGAAAGCTGAACAAAATGAGTGAAAACTCTATACTGTCATCCTCGTCGAACTGAGGTCC	AAGCTGCTCCTACTGTCATATCTCAAAA	GAAAAGGTTCCTTACATATATAACCTTC
HBII-85-23_x_st	SNORD116-23-201	ENST00000384645	SNOG2	High in ERG-related group	GGATCGATGATGACCTCAATACATGCATTCCTTGGAAAGCTGAACAAAATGAGTGAAAACTCTATACCGTCGTCCTCGTCGTCAAACTGAGGTCC	AAACTGCTCCTGCTGCCATATCTCAAAA	GAAAAGGTTCCTTACGTACATAACTCC
HBII-85-11_st	SNORD116-11-201	ENST00000383882	SNOG2	High in ERG-related group	GGATCAATGATGACTTCCATACGTGGGTTCCTTGGAAAGTTGAACAAAATGAGTGAAAACTTTATACTGTCATCCTCTTCAAACTGAGGTCC	AAACTTCTCCTACTGTCATATTTCAAAA	TGAAAGGTTCCTTGGGTGCATACCTTC
HBII-85-14_x_st	SNORD116-14-201	ENST00000383894	SNOG2	High in ERG-related group	GGATCGATGATGACTTCCATATATACATTCCTTGGAAAGCTGAACAAAATGAGTGAAAACTCTATACCGTCATTCTCGTCGAACTGAGGTCC	AAGCTGCTCTTACTGCCATATCTCAAAA	GAAAAGGTTCCTTACATATATAACCTTC
HBII-85-16_x_st	SNORD116-16-201	ENST00000384533	SNOG2	High in ERG-related group	GGATCGATGATGACTTTCATACATGCATTCCTTGGAAAGCTGAACAAAATGAGTGAAAACTCTATACCGTCATCCTCGTCGAACTGAGGTCC	AAGCTGCTCCTACTGCCATATCTCAAAA	GAAAAGGTTCCTTACGTACATATCCTTC
HBII-85-17_x_st	SNORD116-17-201	ENST00000383929	SNOG2	High in ERG-related group	GGATCGATGATGACTTCCATATATACATTCCTTGGAAAGCTGAACAAAATGAGTGAAAACTCTATACCGTCATCCTCGTCGAACTGAGGTCC	AAGCTGCTCCTACTGCCATATCTCAAAA	GAAAAGGTTCCTTACATATATAACCTTC
HBII-85-15_x_st	SNORD116-15-201	ENST00000384445	SNOG2	High in ERG-related group	GGATCGATGATGACTTCCATATATACATTCCTTGGAAAGCTGAACAAAATGAGTGAAAACTCTATACCGTCATCCTCGTCCGTCAAACTGAGGTCC	AAACTGCTCCTACTGCCATATCTCAAAA	GAAAAGGTTCCTTACATATATAACCTTC
HBII-85-22_x_st	SNORD116-22-201	ENST00000384430	SNOG2	High in ERG-related group	GGATCGATGATGACTTCCATATGTACATTCCTTGGAAAGCTGAACAAAATGAGTGAAAACTCTATACCGTCATCCTCGTCGAACTGAGGTCC	AAGCTGCTCCTACTGCCATATCTCAAAA	GAAAAGGTTCCTTACATGTATACCTTC
HBII-85-18_x_st	SNORD116-18-201	ENST00000383961	SNOG2	High in ERG-related group	GGATCGATGATGACTTCCTTATATACATTCCTTGGAAAGCTGAACAAAATGAGTGAAAACTCTATACCGTCATCCTCGTCGAACTGAGGTCC	AAGCTGCTCCTACTGCCATATCTCAAAA	GAAAAGGTTCCTTACATATATTCCTTC
HBII-85-27_x_st	SNORD116-27-201	ENST00000516087	SNOG3	High in ERG-related group	GGATCGATGATGACTTAAAGATTTATCTAATTTAAATCTGAACAAAATGAGTGACCAAAACACTTCTGTACCACTTCTGTGAGCTGAGGTCC	GAGTGTCTTCACCATGTCTTCACAAAACCA	TAAATTTAATCTATTTAGAAATTC
HBII-85-28_st	SNORD116-28-201	ENST00000516123	SNOG3	Variable expression in two groups	GGATGGATGACGACTTAAAAATGAATCTCGTTGGAATCTGAGCAAAACGAGTGAGCAAACCACTTCTGTGCAGTTCTGTGAACTGAGGTCA	AAGTGTCTTGACGTGTCTTCACCAAACGA	TAAGGTTGCTCTAAGTAAAAATTC
HBII-85-13_x_st	SNORD116-13-201	ENST00000384408	SNOG2	Variable expression in two groups	GGACCAATGATGACTTCCATACATGCATTCCTTGGAAAGCTGAACAAAATGAGTGGGAACTCTGTACTATCATCTTAGTTGAACTGAGGTCC	AAGTTGATTCTACTATCATGTCTCAAGG	GAAAAGGTTCCTTACGTACATACCTTC
HBII-85-8_x_st	SNORD116-8-201	ENST00000384365	SNOG1	Variable expression in two groups	GGATCGATGATGAGTCCTCCAAAAAAACATTCCTTGGAAAAGCTGAACAAAATGAGTGAGAACTCATACCGTCGTTCTCATCGGAACTGAGGTCC	AAGGCTACTCTTGCTGCCATACTCAAGA	GAAAAGGTTCCTTACAAAAAAACCTCCTG
HBII-85-1_x_st	SNORD116-1-201	ENST00000384335	SNOG1	Variable expression in two groups	GGATCGATGATGAGTCCCCTATAAAAACATTCCTTGGAAAAGCTGAACAAAATGAGTGAGAACTCATAACGTCATTCTCATCGGAACTGAGGTCC	AAGGCTACTCTTACTGCAATACTCAAGA	GAAAAGGTTCCTTACAAAAATATCCCCTG
HBII-85-2_x_st	SNORD116-2-201	ENST00000384274	SNOG1	Variable expression in two groups	GGATCGATGATGAGTCCCCAAAAAAACATTCCTTGGAAAAGCTGAACAAAATGAGTGAAAACTCATACCGTCATTCTCATCGGAACTGAGGTCC	AAGGCTACTCTTACTGCCATACTCAAAA	GAAAAGGTTCCTTACAAAAAAAACCCCTG
HBII-85-29_st	SNORD116-29-201	ENST00000384516	SNOG3	Variable expression in two groups	GGATCGATGATGACTTAAAAAAATGGAAACCTTGGAAATCTGAACAAAATGAGTGACCAAGACACTTCTGTGAGCTGAGGTCC	GAGTGTCTTCACAGAACCA	TAAAGGTTCCAAAGGTAAAAAAATTC
HBII-85-25_s_st	SNORD116-25-201	ENST00000516517	SNOG3	Variable expression in two groups	GGATCGATGATGACTTTAAAATGGATCTCATCGGAATCTGAACAAAATGAGTGACCAAATCACTTCTGTGCCACTTCTGTGAGCTGAGGTCC	GAGTGTCTTCACCGTGTCTTCACTAAACCA	TAAGGCTACTCTAGGTAAAAATTC
HBII-85-5_x_st	SNORD116-5-201	ENST00000384462	SNOG1	Variable expression in two groups	GGATCGATGATGAGTCCCCCATAAAAACATTCCTTGGAAAAGCTGAACAAAATGAGTGAGAACTCATACCGTCGTTCTCATCAGAACTGAGGTCC	AAGACTACTCTTGCTGCCATACTCAAGA	GAAAAGGTTCCTTACAAAAATACCCCCTG
HBII-85-3_x_st	SNORD116-3-201	ENST00000384287	SNOG1	Variable expression in two groups	GGATCGATGATGAGTCCCCCATAAAAACATTCCTTGGAAAAGCTGAACAAAATGAGTGAGAACTCATACCGTCGTTCTCATCGGAACTGAGGTCC	AAGGCTACTCTTGCTGCCATACTCAAGA	GAAAAGGTTCCTTACAAAAATACCCCCTG
HBII-85-26_x_st	SNORD116-26-201	ENST00000516006	SNOG3	High in non-ERG-related group	GGATCGATGATGACTATAAAAAAAATGGATCTCATCGGAATCTGAACAAAATGAGTGACCAAATCATTTCTGTGCCACTTCTGTGAGCTGAGGTCC	GAGTGTCTTCACCGTGTCTTTACTAAACCA	TAAGGCTACTCTAGGTAAAAAAAATATC
HBII-85-4_x_st	SNORD116-4-201	ENSG00000275529	SNOG1	High in non-ERG-related group	GGATCGATGATGAGTCCCCCCAAAAAAACATTCCTTGGAAAAGCTGAACAAAATGAGTGAAAACTCATACCGTCGTTCTCAGCGGAACTGAGGTCC	AAGGCGACTCTTGCTGCCATACTCAAAA	GAAAAAACCCCCCTG
HBII-85-10_st	SNORD116-10-201	ENST00000363791	SNOG2	High in non-ERG-related group	AGGTTGATGATGACTTACATATATACGTTTTTTTTTTTTTTTTTGGAAAGGTGAACAAAATGAGTGAAAACTCAGTACCATCATCCTCAATCTGAGGTCC	AATCTACTCCTACTACCATGACTCAAAA	GAAAAGGTTTTTTTTTTTTTTTTGCATATATACATTC
HBII-85-6_x_st	SNORD116-6-201	ENST00000384711	SNOG1	High in non-ERG-related group	GGATCGATGATGAGTCCTCCAAAAAAACATTCCTTGGAAAAGCTGAACAAAATGAGTGAAAACTCATACCGTCATTCTCATCGGAACTGAGGTCC	AAGGCTACTCTTACTGCCATACTCAAAA	GAAAAGGTTCCTTACAAAAAAACCTCCTG
HBII-85-12_x_st	SNORD116-12-201	ENST00000384468	SNOG2	High in non-ERG-related group	GGATCAATGATGACTTCCATATATACATTCCTTGGAAAGCTGAATAAAATGAATGAAAACTCTATACCATCATCCTCATTGAACTGAGGTCC	AAGTTACTCCTACTACCATATCTCAAAA	GAAAAGGTTCCTTACATATATATCCTTC

SNORD116 cluster snoRNAs share highly similar structures that include the typical C box (consensus sequence AUGAUGA) near the 5' end, D box (consensus sequence CUGA) near the 3'end, and the C' and D' boxes in the middle of the molecule (consensus sequence CTGAACAAAATGAGTG). Two antisense elements (ASE 1 and ASE 2) are located immediately upstream D and D' boxes, respectively. In the canonical snoRNAs, ASEs guide the complementarity to target RNA molecule (the residue base paring with the fifth nucleotide upstream D or D' box will be target of modification). When ASE 1 and ASE 2 of SNORD116 cluster are grouped in antisense direction (3'-5') and according to the first 10-12 nucleotide sequence upstream D or D' box, different ASE motifs can be identified (listed in the table). Interestingly, the snoRNAs up-regulated in ERG-related patients share highly similar ASEs motifs.

In the table, snoRNA transcripts name and ID according to Ensembl (http://www.ensembl.org/index.html), snoRNA groups (SNOG) according to Castle et al., 2010 [16].