

**Supplemental Figure 1.** Clustal alignment of 70 consensus and 45 active element sequences. The 70 consensus sequences and 45 active sequences were aligned and used to identify 124 positions that were conserved among these elements.

CLUSTAL X (1.83) multiple sequence alignment, manually curated.

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AluYa1_1/1-281      GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
10_Y_534/1-281     GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
11_Y_h10.1/1-281   GGCCGGGCGCGGTGGCTCATG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYd6/1-269       GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYd8/1-269       GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYc5/1-269       GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYb10/1-288      GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYb11/1-289      GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYb8/1-288       GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
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AluYb7_4/1-288     GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYb5/1-281       GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYb6_2/1-281     GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYb3a1/1-281     GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYb3a2/1-281     GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYbc3a/1-282     GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
AluYi6/1-282       GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
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AluYg6a2/1-281     GGCCGGGCGCGGTGGCTCACG-CCTGTAATCCCAGCACTTTGGGAGGCCG
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11_Y_h10.1/1-281	AGGTGGGCGGATCAC--GGGGTCAGGAGATCGAGACTATCCTGGCTAACT
AluYd6/1-269	AGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCA-----
AluYd8/1-269	AGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCA-----
AluYc5/1-269	AGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCA-----
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AluYb11/1-289	AGGCGGGTGGATCAT--GAGGTCAGGAGATCGAGACCATCCTGGCTAACA
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13_pAlu_A/1-286	AGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCATCCTGGCTAACA
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20_Ya5_054/1-285	AGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCATCCCCGCTAAAA
AluYa5/1-281	AGGCGGGCGGATCAC--GAGGTCAGGAGATCGAGACCATCCCCGCTAAAA
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AluSx/1-282	---TGGTGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
5_Sx_5/1-280	---TGGTGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
42_Sx_10/1-279	---TGGTGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
73_Sx_i22T/1-283	---TGGTGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
4_Sx_13/1-280	---TGGTGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
AluSz/1-282	---TGGTGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
AluSg/1-280	---TGGTGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
104_Sg_h11.1/1-280	---TGGCGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
AluSp/1-283	---TGGAGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
105_Sp_h12.1/1-283	---TGGAGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
8_Sx_425/1-280	---TAGTGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
AluSq/1-283	---TGGTGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTA
79_Sx_11/1-282	---TGGTGAAACCCCGTCTCTACTAAAAA-----TACAAAAA----TTT
AluJo/1-282	---TAGCGAGACCCCGTCTCTACAAAAAA-----TACAAAAA----TTA
32_Jo_18/1-280	---TAGCGAGACCCCGT-TCTACAAAAAA-----TACAAAAA----TTA
30_Jo_5/1-282	---TAGCGAGACCCCGTCTCTACAAAAAA-----TACAAAAA----TTA
AluJb/1-282	---TGGTGAAACCCCGTCTCTACAAAAAA-----TACAAAAA----TTA
63_Jo-Ya5/1-282	---TAGCGAGACCCCGTCTCTACAAAAAA-----TACAAAAA----TTA
	**   **       *****   **                   *****       *

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10_Y_534/1-281	GCCGGGCGTAGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
11_Y_h10.1/1-281	GCCGAGCGTAGTGGCAGGTGCCTGTAGTCCCAGCTACTCAG-GAGG-CTG
AluYd6/1-269	GCCGGGCGCAGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYd8/1-269	GCCGGGCGCAGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYc5/1-269	GCCGGGCGCAGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYb10/1-288	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTGGG-GAGG-CTG
AluYb11/1-289	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTGGG-GAGG-CTG
AluYb8/1-288	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYb9/1-288	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTGGG-GAGG-CTG
AluYb7_2/1-288	GCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYb7_1/1-288	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYb7_3/1-288	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYb6_1/1-288	GCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYb7_4/1-288	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYb5/1-281	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYb6_2/1-281	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYb3a1/1-281	GCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYb3a2/1-281	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYbc3a/1-282	GCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYi6/1-282	GCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
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100_Y_h6.1/1-281	GCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
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AluYh7/1-281	GCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYh3/1-281	GCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYe5/1-280	GCCGGGCGAGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
128_Ye5_d196/1-279	GCCGGGCGAGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYe6/1-280	GCCGGGCGAGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYe4/1-282	GCCGGGCGAGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYe2/1-279	GCCGGGCGAGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
102_Y_T144C/1-281	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYf2/1-283	GCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
86_Yf2_38/1-283	GCCGGGCGTGGTGGCGGGCGCCTGTAAACCCAGCTACGCGG-GAGG-CTG
AluYf1/1-281	GCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
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25_Yc1_73/1-279	GCCGGGCGTGGTAGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYc2/1-281	GCCGGGCGTGGTAGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
27_Yc1_66/1-280	GCCGGGCGTGGTAGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
13_pAlu_A/1-286	GCCGGGCGTGGTAGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYa1_2/1-281	GCCGGGCGTAGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYd3a1/1-270	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGGAGAGG-CTG
AluYd3/1-269	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
AluYd2/1-269	GCCGGGCGGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG-GAGG-CTG
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19_Ya5_173/1-281	GCTGGGCGTAGTGGCGGGCGCCTGTAGTCCCAGCTACTTGG-GAGG-CTG
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64_Ya5_G25C/1-281	GCCGGGCGTAGTGGCGGGCGCCTGTAGTCCCAGCTACTTGG-GAGG-CTG
92_Ya5#-Ya5#_95/1-278	GCCGGGCGTAGTGGCGGGCACAT-CAG--CCAGCTACTTGG-GAGG-CTG
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AluYa5a1/1-281	GCCGGGCGTAGTGGCGGGCGCCTGTAGTCCCAGCTACTTGG-GAGG-CTG
AluYa5b1/1-281	GCCGGGCGTAGTGGCGGGCGCCTGTGGTCCCAGCTACTTGG-GAGG-CTG
AluYa5a2/1-282	GCCGGGCGTAGTGGCGGGCGCCTGTAGTCCCAGCTACTTGG-GAGG-CTG
20_Ya5_054/1-285	GCCGGGCGTAGTGGCGGGCGCCTGTAGTCCCAGCTACTTGG-GAGG-CTG
AluYa5/1-281	GCCGGGCGTAGTGGCGGGCGCCTGTAGTCCCAGCTACTTGG-GAGG-CTG
AluYa8/1-280	GCCGGGCGTAGTGGCGGGCGCCTGTAGTCCCAGCTACTTGG-GAGG-CTG





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 AluYa2/1-281  
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 AluSc/1-279  
 108\_Sc\_h1.1/1-279  
 AluSx/1-282  
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 73\_Sx\_i22T/1-283  
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 AluSq/1-283  
 79\_Sx\_11/1-282  
 AluJo/1-282  
 32\_Jo\_18/1-280  
 30\_Jo\_5/1-282  
 AluJb/1-282  
 63\_Jo-Ya5/1-282

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 10\_Y\_534/1-281 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 11\_Y\_h10.1/1-281 AGATTGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYd6/1-269 AGATCGCGCCACAGCACTCC-----CGCCTGGGCGACA-GAACGAGAC  
 AluYd8/1-269 AGATCGCGCCACAGCACTCC-----CGCCTGGGCGACA-GAACGAGAC  
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 AluYb7\_4/1-288 AGATTGCGCCACTGCAGTCCGAGTCCGAGTCCGAGCCTGGGCGACA-GAGCGAGAC  
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 AluYb6\_2/1-281 AGATTGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYb3a1/1-281 AGATTGCGCCACTGCAGTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYb3a2/1-281 AGATAGCGCCACTGCAGTCC-----GGCCTGGGCGAAA-GAGCGAGAC  
 AluYbc3a/1-282 AGATAGCGCCACTGCAGTCC-----AGCCTGGGCGAAA-GAGCGAGAC  
 AluYi6/1-282 AGATTGCGCCACTGCACCTCC-----CGCCTGGGCCACA-GAGCGAGAC  
 111\_Yc1\_h20.1/1-281 AGATTGCGCCACTGCACCTCC-----CACCTGGGCCACA-GAGCGAGAC  
 AluYg6a2/1-281 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAAAC  
 AluYg6/1-281 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAAAC  
 22\_Yg6\_397/1-280 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAAAC  
 28\_Yc1\_65/1-280 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAAAC  
 AluYg5b3/1-281 AGATCGCGCCACTGCAGTCC-----AGCCTGGGCGACA-GAGCGAAAC  
 100\_Y\_h6.1/1-281 ACATCGCCACTGCACCTCC-----AGCCTGGTGCACA-GAGCGAGAC  
 AluYj4/1-281 AGATCGTGCCTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 50\_Yj4\_11/1-281 AGATCGTGCCTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYj3/1-281 AGATCGTGCCTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 60\_Y\_h14/1-282 AGATCATGCCACTGCACCTCC-----AACCTGGGCGACA-GAGCGAGAC  
 AluYh9/1-281 AGGTGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 71\_Yh9\_20/1-282 AGGTGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYh7/1-281 AGGTGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYh3/1-281 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYe5/1-280 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-G--CGAGAC  
 128\_Ye5\_d196/1-279 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-G--CGAGAC  
 AluYe6/1-280 AGATCGCGCCACTGCACCTCC-----AACCTGGGCGACA-G--CGAGAC  
 AluYe4/1-282 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYe2/1-279 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-G--CGAGAC  
 102\_Y\_T144C/1-281 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYf2/1-283 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 86\_Yf2\_38/1-283 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYf1/1-281 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluY/1-281 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYc1/1-281 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 25\_Yc1\_73/1-279 AGATCGCGCCA-TGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYc2/1-281 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 27\_Yc1\_66/1-280 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 13\_pAlu\_A/1-286 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYa1\_2/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYd3a1/1-270 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYd3/1-269 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYd2/1-269 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYd/1-269 AGATCGCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 19\_Ya5\_173/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 125\_Ya5\_C138T/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 64\_Ya5\_G25C/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 92\_Ya5#-Ya5#\_95/1-278 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 117\_Ya5\_G159C/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 116\_Ya5\_G25C/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGT  
 119\_Ya5\_G25C/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGT  
 118\_Ya5\_G159C/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGT  
 120\_Ya5\_AC275TG/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGT  
 AluYa5a1/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYa5b1/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYa5a2/1-282 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 20\_Ya5\_054/1-285 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYa5/1-281 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC  
 AluYa8/1-280 AGATCCCGCCACTGCACCTCC-----AGCCTGGGCGACA-GAGCGAGAC

81_Ya5_C150T/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa5c1/1-281	AGGTCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
124_Ya5_G21A_C23T/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
112_Ya5_rtSRPko/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
18_Ya5_874/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa5b2/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
99_Ya5_A131T_C206T/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa3_2/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa4_1/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa3_3/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa4_3/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa4_2/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa4b/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa3_1/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
15_Ya4_677/1-281	AGATCGTGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
16_Ya4_704/1-283	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa4/1-281	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa4_5/1-281	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa4_4/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa3_5/1-281	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa3_4/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa3/1-281	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluYa2/1-281	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
62_Sx-Ya5/1-282	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluSc/1-279	AGATCGCGCCACTGCACTCC-----AGCCTGG-CGACA-GAGCGAGAC
108_Sc_h1.1/1-279	ACATCGCGCCACTGCACTCC-----AGCCTGG-CGACA-GAGCAAGAC
AluSx/1-282	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
5_Sx_5/1-280	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
42_Sx_10/1-279	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
73_Sx_i22T/1-283	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
4_Sx_13/1-280	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluSz/1-282	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluSg/1-280	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
104_Sg_h11.1/1-280	AGATCGCACCACTGCACTCC-----AGCCTGGGTGACA-GAGCGAGAC
AluSp/1-283	AGATCGCGCCATTGCACTCC-----AGCCTGGGCAACAAGAGCGAAAC
105_Sp_h12.1/1-283	AGATCGCGCCATTGCACTCC-----AGCCTGGGCAACAAAAGTGAAC
8_Sx_425/1-280	AGATCGCGCCATTGCACTCC-----AGCCTGG-CAACA-GAGCGAGAC
AluSq/1-283	AGATCGCGCCACTGCACTCC-----AGCCTGGGCAACAAGAGCGAAAC
79_Sx_11/1-282	AGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluJo/1-282	TGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
32_Jo_18/1-280	TGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
30_Jo_5/1-282	TGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
AluJb/1-282	TGATCGCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
63_Jo-Ya5/1-282	AGATCCCGCCACTGCACTCC-----AGCCTGGGCGACA-GAGCGAGAC
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AluYa1_1/1-281	TCCGTCTC
10_Y_534/1-281	TCCGTCTC
11_Y_h10.1/1-281	TCCGTCTC
AluYd6/1-269	TCCGTCTC
AluYd8/1-269	TCCGTCTC
AluYc5/1-269	TCCGTCTC
AluYb10/1-288	TCCGTCTC
AluYb11/1-289	TCCGTCTC
AluYb8/1-288	TCCGTCTC
AluYb9/1-288	TCCGTCTC
AluYb7_2/1-288	TCCGTCTC
AluYb7_1/1-288	TCCGTCTC
AluYb7_3/1-288	TCCGTCTC
AluYb6_1/1-288	TCCGTCTC
AluYb7_4/1-288	TCCGTCTC
AluYb5/1-281	TCCGTCTC
AluYb6_2/1-281	TCCGTCTC
AluYb3a1/1-281	TCCGTCTC
AluYb3a2/1-281	TCCGTCTC
AluYbc3a/1-282	TCCGTCTC
AluYi6/1-282	TCCGTCTC
111_Yc1_h20.1/1-281	TCCGTCTC
AluYg6a2/1-281	TCCGTCTC
AluYg6/1-281	TCCGTCTC
22_Yg6_397/1-280	TCCGTCTC
28_Yc1_65/1-280	TCCGTCTC
AluYg5b3/1-281	TCCGTCTC
100_Y_h6.1/1-281	TCCGTCTC
AluYj4/1-281	TCCGTCTC
50_Yj4_11/1-281	TCCGTCTC
AluYj3/1-281	TCCGTCTC
60_Y_h14/1-282	CCTGTCTC
AluYh9/1-281	TCCGTCTC
71_Yh9_20/1-282	TCCGTCTC
AluYh7/1-281	TCCGTCTC
AluYh3/1-281	TCCGTCTC
AluYe5/1-280	TCCGTCTC
128_Ye5_d196/1-279	TCCGTCTC
AluYe6/1-280	TCCGTCTC
AluYe4/1-282	TCCGTCTC
AluYe2/1-279	TCCGTCTC
102_Y_T144C/1-281	TCCGTCTC
AluYf2/1-283	TCCGTCTC
86_Yf2_38/1-283	TCCGTCTC
AluYf1/1-281	TCCGTCTC
AluY/1-281	TCCGTCTC
AluYc1/1-281	TCCGTCTC
25_Yc1_73/1-279	TCCGTCTC
AluYc2/1-281	TCCGTCTC
27_Yc1_66/1-280	TCCGTCTC
13_pAlu_A/1-286	TCCGTCTC
AluYa1_2/1-281	TCCGTCTC
AluYd3a1/1-270	TCCGTCTC
AluYd3/1-269	TCCGTCTC
AluYd2/1-269	TCCGTCTC
AluYd/1-269	TCCGTCTC
19_Ya5_173/1-281	TCCGTCTC
125_Ya5_C138T/1-281	TCCGTCTC
64_Ya5_G25C/1-281	TCCGTCTC
92_Ya5#-Ya5#_95/1-278	TCCGTCTC
117_Ya5_G159C/1-281	TCCGTCTC
116_Ya5_G25C/1-281	TCCGTCTC
119_Ya5_G25C/1-281	TCCGTCTC
118_Ya5_G159C/1-281	TCCGTCTC
120_Ya5_AC275TG/1-281	TCCGTCTC
AluYa5a1/1-281	TCCGTCTC
AluYa5b1/1-281	TCCGTCTC
AluYa5a2/1-282	TCCGTCTC
20_Ya5_054/1-285	TCCGTCTC
AluYa5/1-281	TCCGTCTC
AluYa8/1-280	TCCGTCTC

81_Ya5_C150T/1-281	TCCGTCTC
AluYa5c1/1-281	TCCGTCTC
124_Ya5_G21A_C23T/1-281	TCCGTCTC
112_Ya5_rtSRPko/1-281	TCCGTCTC
18_Ya5_874/1-281	TCCGTCTC
AluYa5b2/1-281	TCCGTCTC
99_Ya5_A131T_C206T/1-281	TCCGTCTC
AluYa3_2/1-281	TCCGTCTC
AluYa4_1/1-281	TCCGTCTC
AluYa3_3/1-281	TCCGTCTC
AluYa4_3/1-281	TCCGTCTC
AluYa4_2/1-281	TCCGTCTC
AluYa4b/1-281	TCCGTCTC
AluYa3_1/1-281	TCCGTCTC
15_Ya4_677/1-281	TCCGTCTC
16_Ya4_704/1-283	TCCGTCTC
AluYa4/1-281	TCCGTCTC
AluYa4_5/1-281	TCCGTCTC
AluYa4_4/1-281	TCCGTCTC
AluYa3_5/1-281	TCCGTCTC
AluYa3_4/1-281	TCCGTCTC
AluYa3/1-281	TCCGTCTC
AluYa2/1-281	TCCGTCTC
62_Sx-Ya5/1-282	TCCGTCTC
AluSc/1-279	TCCGTCTC
108_Sc_h1.1/1-279	TCTGTCTC
AluSx/1-282	TCCGTCTC
5_Sx_5/1-280	TCCGTCTC
42_Sx_10/1-279	TCCGTCTC
73_Sx_i22T/1-283	TCCGTCTC
4_Sx_13/1-280	TCCGTCTC
AluSz/1-282	TCCGTCTC
AluSg/1-280	TCCGTCTC
104_Sg_h11.1/1-280	TCCATCTC
AluSp/1-283	TCCGTCTC
105_Sp_h12.1/1-283	TCCGTCTC
8_Sx_425/1-280	TCCGTCTC
AluSq/1-283	TCCGTCTC
79_Sx_11/1-282	TCCGTCTC
AluJo/1-282	CCTGTCTC
32_Jo_18/1-280	CCTGTCTC
30_Jo_5/1-282	CCTGTCTC
AluJb/1-282	CCTGTCTC
63_Jo-Ya5/1-282	TCCGTCTC
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