

**Table S1. Primers Used for Amplification of Deletion Junctions and Sequences Flanking Breakpoints**

Case #	Chromosome Abnormality	Forward Primer (5'-3')	Reverse Primer (5'-3')	Breakpoint Sequence
8705		TGGTGGGGAAATCACATTATT	CATTAAGGACACAAAGCTGTAAA	Chr 7q22.1 + AGGGGGGATTTGAACAAGAAAAACCCCGTGCATCGGAAAAGTGGCTCTTACATATCTCAAATCTAAAGGAAGTTTGTGTTGTTGT LCR(TTG) /G/ Chr 7q31.31 + AAGTGAAGGAAACATAAAGACAAAGTTCTTGAATGAATTAATTTGTATATTTGATAAAGACAAAGTCCATTGTATTCTAAGCCTGGCACAGA L2
8399	Del(7)(q11.22q21.11)*	CCAGAGGGCACATTGCTATT	CCCATTACGTTTGCAATGA	Chr 7q11.22 + CAATTCAGTTTTTGTCTGGTTGATGGTTAGTGGAAACGGTAGTAAAGCACATCTCCTTGTAACTCTTTGGTTAAAAGAGATGAGGGATGTTGCAC/ Unique Chr 7q21.11 + ATAACTCCAGATAAAGACTATCAAGAAGATAGATGGTAGCACCCAGGACTGTCCAAGTAGACGTGAAAACCCAGATGATGGTTCTTTTTAGGCATATT Unique
9101	Del(5)(p15.2p14.3) / Inv(5)(p14.3p14.2)	TGCAGCCTCAAAGCTTG	GTGGCCCACTGGAAGTAAGA	Chr 5p15.2 + AGTAAGCTACTACTACGCTTCTGACTTGGGAATTTTGTCTTTAAAGAAAACCAAGTGTGCAGAAGTAAGAGTTAATTTATTTAAAGACTAGTACTA Unique /A/ Chr 5p14.2 - ACTAAGTTGATCACAGTAAGGACCTCCTCATGCCTCAAGGCAGAAATTTCCAAAATATATGCTGTGCTCAGCTTTGGTCACTTTGTTGAATTGCATATAT Unique Chr 5p14.3 - AAATGTTGAATAATTTTATATAGACACTTTAATAGAGTTCTCAGTTGTGGAGTATGCTTCTCTAATATTAAGAGCCTAATATATACTGGCCTTTCT/ Unique Chr 5p14.2 + CCTTAGTAGGTGTTCAATTTCCAGATCCCTTGGCAATTAGAAGTTGTAGCCTGACCATAGTGTATGTTTTTCAATTTATCCCTTCTCATTGCCAAGG Unique
9061	Del(7)(q11.23q11.23)a*	TCTTCTCGCTTACATCT	TCCCAATAAGCAGTGAGG	Chr 7q11.23 + GCTCACACCTGTAATCCAGCACCTTTGGGAGGCTAGTGGTGAATAACGAGGCCAGGAGATCAAGACCAGCCTGCCAACATGGTGAACCCCGTCTCC AluSc /ACTAAAAATACAAAA/ Chr 7q11.23 + ATTAGCTGGGTGTGGTGGCGCATGCCATAGTCCAGCTACTCAGGAGGCTGAGACACAAGAACTACTTGAGCCCGGAGGCGAAGGTTGTAGGGAGCTG AluSx
9101	Del(7)(q11.23q11.23)b	CAGCAGAACGACGCCGCCGACAA	CTTGGCAGGCAATAGTCACTT	Chr 7q11.23 + ATTTAAACCATTTGAAGATGAAGAGTCTATTTTAGAGTACTGAGTAAATTTGATGGAACATAACACACACGCAATACATGTAAGAACTGGTAGAAC LCR(L1MD2) /CTG/ Chr 7q11.23 + AGGCAGGAGAGTGGCATGAACCCAGGAAGTGGAGCTAGCAGTGAAGTATGATCATGCCACTGCACTCCAGCCTGGGTGACAGAGCGAGACTCCGCTCTCAA AluYd8
9239	Del(5)(q15q15)*	TCCTGGCTAACAGATTGTTG	TCAGGAGACTGAATTTTGAGAA	Chr 5q15 + AAATGGTTAAAAGCCACAATAAAAAGACACAGACTTGCAAATGGATAAAGAGTCAAGACCCATTAGTGGGCTGATTCGGGAGACCCATCTCACGTGC L1PA7 /AAA/ Chr 5q15 + TTTGCCCTCCTACCTTTTTTTGTTCTATTAGGCTCAATTTATGAATAATGAGGGAAGATCTCTTTACTCAGTCTCTGATTCAAATGCTAATCACT LTR MLT2B2
9152	Del(7)(q11.23q11.23)c	GATGGCAGTTGACTACCT	ATCTGGTCTGCTCAGCTA	Chr 7q11.23 + TTTTAAGACGAGTCTGTCTCTGTGCCAGGCTGGAGTACAGTACCTGATCTCGGTTCTCCGACGCTCCGCTCTGGGTTCAAGTATTCTCTGCTC AluSx /CTCA/ Chr 7q11.23 + AGTCTGGCCGGCGCAGTGGCTCACGCTGTAATCCAGCACCTTTGGGAGGCAAGGCAGGTGATCACAAGTCAAGGAGTTCAAGACCAGCCTGGCCAA LCR(AluSg)

Sequences show 100bp flanking chromosome abnormalities and their observed orientations. Shared or inserted bases at junctions are shown on middle line. Breakpoints are indicated by /, inserted bases are shown in bold, regions of sequence identity are italicized, and sequence present at both breakpoints of chromosome 5p rearrangement are underlined. Type of repetitive sequence is shown to right. Forward primers for amplification of 9101 5p14.3 and 7q11.23 sequences are complementary to adaptor used for adaptor ligation mediated PCR walking [Padegimas & Reichert]. \* denotes deletions cloned directly from SNP copy number data