

SUPPLEMENTARY APPENDIX

Low frequency of type-I and type-II aberrations in myeloid leukemia of Down syndrome, underscoring the unique entity of this disease

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Online Supplementary Table S1. Hotspot regions, primers and PCR conditions for the investigated genes.

Gene*	Region / Exon	Primer sequences	PCR conditions**
<i>NPM1</i> ¹	exon 12	5'-CTGGTGGTAGAATGAAAAATAGAT-3' 5'-GGCAGGGACATTCTCATAG-3'	1
<i>CEBPA</i> ²	whole gene	5'-CGCCATGCCGGGAGAACCTCT-3'	2
		5'-CTTGGCTTCATCCTCTCGC-3'	
		5'-CGGCGCTGGTGTCAAG-3'	3
		5'-CCAGGGCGGTCCCACAGC-3'	
<i>MLL</i> ³	specific PTD's	5'-AGGAGAGAGTTTACCTGCTC-3' 5'-GGAAGTCAGCAAGCAGGTC-3'	1
<i>WT1</i> ⁴	exon 7	5'-CATGGGGATCTGGAGTGTGA-3'	1
		5'-TGGGCTCTAGCAGTGTGAGA-3'	
		5'-TAGGGCCGAGGCTAGACC-3'	1
		5'-TTCCAATCCCTCTCATCACAAAT-3'	
<i>FLT3</i> ⁵	exon 14/15 (ITD) exon 20 (TKD)	5'-GCAATTAGGTATGAAAGCCAGC-3' 5'-CTTCAGCATTTGACGGCAACC-3'	1
		5'-TCACCG GTACCTCTACTG-3' 5'-AAATGCACCAACAGTGAGTG-3'	1
<i>N-RAS</i> ⁶	exon 2 exon 3	5'-GGGGTTGCTAGAAAACA-3' 5'-ATCCGACAAGTGGAGAGACA-3'	1
		5'-CCCAGGATTCTTACAGAAA-3' 5'-TCCCCATAAAGATTCAAACAC-3'	1
<i>K-RAS</i> ⁶	exon 2	5'-CGTCGATGGAGGAGTT-3' 5'-AACCAAGGTACATTTCAGA-3'	1
<i>PTPN11</i> ⁶	exon 3 exon 13	5'-TTGGTTCTTCAACACTT-3'	1
		5'-GCCTTGGAGTCAGAGAGT-3'	
		5'-TGGCTCTGAGTTCTC-3'	1
		5'-CATTCCGAAATCAAACAGTT-3'	
<i>KIT</i> ⁶	exon 8 exon 17	5'-CCGCTCCTTGTACCTT-3' 5'-TTCAAGCAAACAAATTAAATGTCTA-3'	4
		5'-TCCTCCAACCTAATAGTGTATT-3' 5'-CATTCCGAAATCAAACAGTT-3'	4
<i>IDH1</i>	exon 4	5'-TTGGGAATTGATTAAGAGAAA-3' 5'-CACCACCTCTTCAAGTTATG-3'	1
<i>IDH2</i>	exon 4	5'-AACCGTGACCAGACTGTATG-3' 5'-GTTCTTGGTGTATGACAG-3'	1
<i>DNMT3A</i> ⁷	exon 12-23	5'-GCCACAGAGAAGAGAAGA-3' 5'-GCACCTGAGCAGTGT-3'	1
		5'-CCGGAACATTGGAGGACA-3' 5'-CTGGACAGGTGGTAA-3'	1
		5'-CGGAGGTGTGAGGACT-3' 5'-GTTCATACCGGAAAGGTAC-3'	1
		5'-CTCCAGATGTTCTCGCTAA-3' 5'-CCACTCCTGGATATGCTTCT-3'	1

*Superscript numbers refer to the below mentioned papers in which the methods were fully described. ** numbers refer to the following PCR programs:

¹10° 95°C, 40 cycles of 1° 95°C and 1° 60°C, 10° 72°C.

²10° 95°C, 35 cycles of 1° 95°C, 1° 60°C and 1° 72°C, 10° 72°C.

³10° 95°C, touchdown 20 cycles of 1° 95°C, 1° 70-60°C and 1° 72°C plus 20 cycles of 1° 95°C, 1° 60°C and 1° 72°C, 10° 72°C.

⁴10° 95°C, touchdown 20 cycles of 1° 95°C, 1° 66-56°C and 1° 72°C plus 14 cycles of 1° 95°C, 1° 56°C and 1° 72°C, 10° 72°C.

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