Table S2. *BTG1* deletion breakpoint sequences in BTG1 MLPA deletion-positive BCP-ALL cases and cell lines.

Patient/Cell line	Sequence	Additional Nucleotides	Deletion
Proximal (exon 2 *BTG1*)			
Reference	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA**CACTCTG**GG		
BCP-ALL 1008	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGA	cccctccctgggggcc	III
BCP-ALL 1014	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	tag	III
BCP-ALL 1048	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	gg	III
BCP-ALL 1069	TCAGGAGCTGTTCAGGC	cggcccggaggg	III
BCP-ALL 1084	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	tgggg	V
BCP-ALL 1086	TCAGGAGCTGTTCAGGCTTCTCCCAAGT	agaaggggacc	VI
BCP-ALL 1097	TCAGGAGCTGTTCAGGCTTCTCCCAAG	cccc	III
BCP-ALL 1134*1a	TCAGGAGCTGTTCAGGCTTCTCCCAAGTG	gaaa	III
BCP-ALL 1134*1b	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	gg	III
BCP-ALL 1134*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACT	ggggg	VIII
BCP-ALL 1135*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGT	cctagg	I
BCP-ALL 1135*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAAC	a	III
BCP-ALL 1146*1a	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAA	g	III
BCP-ALL 1146*1b	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	taa	III
BCP-ALL 1146*2	TCAGGAGCTGTTCAGGCTTCTCCC	ggggtta	V
BCP-ALL 1146*3	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAAC	cctc	VIII
BCP-ALL 1157*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGA	tctct	III
BCP-ALL 1157*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAAC	ccccccccaataggg	IV
BCP-ALL 1177	TCAGGAGCTGTTCAGGCTTC	cggg	III
BCP-ALL 1216	TCAGGAGCTGTTCAGGCTTCTCCCAAGT	cctcacgg	III
BCP-ALL 1238*1	TCAGGAGCTGTTCAGGCT	cct	III
BCP-ALL 1238*2	TCAGGA	cccttgaggg	V
BCP-ALL 1240*1	TCAGGAGCTGTTCAGGCTTC	gttcccc	II
BCP-ALL 1240*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	cgatttagga	III
BCP-ALL 1244*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACT	ggg	III
BCP-ALL 1244*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAA	ccctg	V
BCP-ALL 1244*3	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	gat	VIII
BCP-ALL 1264	TCAGGAGCTGTTCAGGCT	cggg	III
BCP-ALL 1273	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	tgagca	III
BCP-ALL 1278	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACT	tcatggggg	III
BCP-ALL 1315	TCAGGAGCTGTTCAGGCTTC	gttcccc	II
BCP-ALL 1316	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	ttcg	V
BCP-ALL 1341*1	TCAGGAGCTGTTCAGGCTTC	gttcccc	II
BCP-ALL 1341*2	TCAGGAGCTGTTCAGGCTTCTCCCAAG	ccaacctcggggg	III
BCP-ALL 1341*3	TCAGGAGCTGTTCAGGCTTCTCCCAAG	taaaagt	V
BCP-ALL 1341*4	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACT	ccttac	VIII
BCP-ALL 1344*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTG	gggga	III
BCP-ALL 1344*2a	TC	-	V
BCP-ALL 1344*2b	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	gag	V
BCP-ALL 1385	TCAGGAGCTGTTCAGG	ttcgcc	VIII
BCP-ALL 1411	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	tggg	III
BCP-ALL 1442	TCAGGAGCTGTTCAGGCT	gcggggg	III
BCP-ALL 1457*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	cccttcccatttagatgaagg	III
BCP-ALL 1457*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	-	V
BCP-ALL 1471	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	-	V
BCP-ALL 1490	TCAGGAGCTGTTCAGGCTTC	gttcccc	II
BCP-ALL 1529	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	tgg	III
BCP-ALL 1545*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	ccccccg	III

Patient/Cell line	Sequence	Additional Nucleotides	Deletion
Proximal (exon 2 *BTG1*)			
BCP-ALL 1545*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGT	aag	V
BCP-ALL 1559*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAAC	ccctcgagag	III
BCP-ALL 1559*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAAC	cgcggg	VIII
BCP-ALL 1582	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAAC	cccaagg	III
BCP-ALL 1592	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAAC	ctgtt	III
BCP-ALL 1598	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	cgggggag	VII
BCP-ALL 1599	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGA	cacttccc	III
BCP-ALL 1629*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTG	ccccct	III
BCP-ALL 1736*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTG	ggg	VIII
BCP-ALL 1630*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	taggggggg	III
BCP-ALL 1630*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTG	gga	VIII
BCP-ALL 1654	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	cgggggag	VII
BCP-ALL 1736*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	tccgg	III
BCP-ALL 1736*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTG	ggg	VIII
BCP-ALL 1749	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAA	aggggagggg	III
BCP-ALL 1755	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACT	gg	VIII
BCP-ALL 1767	TCAGGAGCTGTTCAGGCTTC	gttcccc	II
BCP-ALL 1772*1	TCAGGAGCTGTTCAGGCTTC	aaggg	III
BCP-ALL 1772*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGT	ccctcgt	VIII
BCP-ALL 1779	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	ttccc	V
BCP-ALL 1827	TCAGGAGCTGTTCAGGCTTC	gttcccc	II
BCP-ALL 1838	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	tg	VIII
BCP-ALL 1853*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	tgtt	III
BCP-ALL 1853*2	TCAGGAGCTGTTCAGGCTTCTCCC	ctc	IV
BCP-ALL 1865	TCAGGAGCTGTTCAGGCTTCTCC	ccccgc	III
BCP-ALL 1888	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAAC	gaag	III
BCP-ALL 1894	TCAGGAGCTGTTCAGGCTT	cccc	VIII
BCP-ALL 1896*1	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTC	tt	III
BCP-ALL 1896*2	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	ga	VIII
Cell line 380	TCAGGAGCTGTTCAGGCTTC	gttccc	II
Cell line Mutz5	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACT	ag	IV
Cell line REH	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAAC	cccgg	III
Cell line SupB15	TCAGGAGCTGTTCAGGCTTCTCCCAAGTGAACTCA	cca	IV
Distal deletion I			
Reference	GAGCTATGC**TACTGTG**TAGCTTAGGACAACTCGTTTGTCTGCTCTGGTACTCAAGT		
BCP-ALL 1135*1	GCTTAGGACAACTCGTTTGTCTGCTCTGGTACTCAAGT		
Distal deletion II			
Reference	CATACCTGTGTACGTGTTTAATTTCCTTTTTTTTTTTTTTTTTTTTTTGAGACAGA		
Cell line 380	TTTTTTTTTTTTTTTTGAGACAGA		
BCP-ALL 1240*1	TTTTTTTTTTTTTTTTGAGACAGA		
BCP-ALL 1315	TTTTTTTTTTTTGAGACAGA		
BCP-ALL 1341*1	TTTTTTTTTTTTATGAGACAGA		
BCP-ALL 1490	TTTTTTTTTTTTTTTGAGACAGA		
BCP-ALL 1767	TTTTTTTTTTTTTCTTGAGACAGA		
BCP-ALL 1827	TTTTTTTTTTTTTTTTTGAGACAGA		
Distal deletion III (most frequent recombination hotspot)			
Reference	AAGATGTTC**CATTGTG**TGAAACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1008	CGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1014	ACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1048	GAAACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1069	CAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1097	GAAACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		

Patient/Cell line	Sequence	Additional Nucleotides	Deletion
Distal deletion III (most frequent recombination hotspot)			
BCP-ALL 1134*1a	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1134*1b	CGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1135*2	AGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1146*1a	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1146*1b	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1157*1	AGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1177	GGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1216	TAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1238*1	AACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1240*2	TGAAACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1244*1	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1264	ACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1273	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1278	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1341*2	ACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1344*1	TGAAACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1411	AACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1442	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1457*1	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1529	AACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1545*1	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1559*1	AGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1582	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1592	AAACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1599	CAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1629	AAACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1630*1	CAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1736*1	GAAACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1749	AACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1772*1	GAAACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1853*1	ACAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1865	GCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1888	CAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
BCP-ALL 1896*1	CAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
Cell line REH	GAAATAGCGGCTCCTAGCTTTCATACATTTCCAGGATCA		
Distal deletion IV			
Reference	GAAGAAAACAGCTGTGTGCAGATAGACAATAGGGAAAAGGCACAGGAAGAGGAACT		
Cell line Mutz5	GATAGACAATAGGGAAAAGGCACAGGAAGAGGAACT		
Cell line SupB15	TGCAGATAGACAATAGGGAAAAGGCACAGGAAGAGGAACT		
BCP-ALL 1157*2	CAATAGGGAAAAGGCACAGGAAGAGGAACT		
BCP-ALL 1853*2	GATAGACAATAGGGAAAAGGCACAGGAAGAGGAACT		
Distal deletion V (third frequent recombination hotspot)			
Reference	CCAATGCACTGCAGTGCCAGCTCCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA		
BCP-ALL 1084	CCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA		
BCP-ALL 1146*2	CCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA		
BCP-ALL 1238*2	AGGGCCAGGCAGTAAATATTTGTTGAATGAAA		
BCP-ALL 1244*2	CAGCTCCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA		
BCP-ALL 1316	GCTCCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA		
BCP-ALL 1341*2	CCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA		
BCP-ALL 1344*2a	CCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA		
BCP-ALL 1344*2b	CCAGCTCCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA		
BCP-ALL 1457*2	CAGCTCCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA		

Patient/Cell line	Sequence	Additional Nucleotides	Deletion
Distal deletion V (third frequent recombination hotspot)			
BCP-ALL 1471		GCTCCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA	
BCP-ALL 1545*2		GGGGCAGGCAGTAAATATTTGTTGAATGAAA	
BCP-ALL 1779		CCAGCTCCAGGGCCAGGCAGTAAATATTTGTTGAATGAAA	
Distal deletion VI			
Reference	GGGAATGGC**CTCTGTG**CCTGTCAGCTTGGACTTTCCAAAGTCAGCAGGCTGGAATG		
BCP-ALL 1086		GTCAGCTTGGACTTTCCAAAGTCAGCAGGCTGGAATG	
Distal deletion VII			
Reference	AGATAAATT**CACAGTG**TAAAAGCAATTATGATTTCCATAGATATTGCCAATGTCAA		
BCP-ALL 1598		ATGATTTCCATAGATATTGCCAATGTCAA	
BCP-ALL 1654		ATGATTTCCATAGATATTGCCAATGTCAA	
Distal deletion VIII (second frequent recombination hotspot)			
Reference	TAACGTTAT**CACTGTG**GGACAGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT		
BCP-ALL 1134*2		AGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1146*3		GACAGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1244*3		AGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1341*4		GCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1385		GACAGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1559*2		AGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1736*2		GCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1630*2		AGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1736*2		GCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1755		CAGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1772*2		ACAGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1838		CAGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1894		GGACAGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	
BCP-ALL 1896*2		ACAGCGTAGTGTGTTTGGGAAAACTTAGTCTTTTTTGT	

Sequencing of intragenic *BTG1* deletions demonstrates the presence of (near) consensus DNA sequence motifs for V(D)J recombination flanking the breakpoint hotspot in exon 2 of *BTG1* and the distal breakpoint clusters. The consensus heptamer RSS [CAC(A/T)(A/G)(C/T)(A/G) on (+) strand and (C/T)(A/G)(C/T)(A/T)GTG on (-) strand] is shown in red and bold. Mismatches from consensus are underlined. Single nucleotide mutations are indicated in grey. The nucleotides inserted between the proximal *BTG1* and the distal breakpoints are indicated.