

Nb	NotI site	Insertions	EcoRI site	Δ
	Clones	from	normal cells	
	TATAGGGCGAATTGGAGCTCCACCGCGGTGGC----		AATTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	
	ATATCCCCTTAACCTCGAGGTGGCGCCACCGCCGG		----GCTAGCCCCGGGGGAGCTCCAGCTGGTGTCA	
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		AATTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	0bp
6	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		---TCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-3bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		----CGATCGGGCCCCCCTCGAGGTCGACCACAGT	-4bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGG--		---TCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-5bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		-ATTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-1bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCG---	+CCC	-ATTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-4bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		-----ATCGGGCCCCCCTCGAGGTCGACCACAGT	-6bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGC----		---TCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-7bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		-----CGGGCCCCCCTCGAGGTCGACCACAGT	-8bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		-----GGGCCCCCCTCGAGGTCGACCACAGT	-9bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGT-----		--TTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-9bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGC----		----GATCGGGCCCCCCTCGAGGTCGACCACAGT	-9bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCG---	+CC	-----TCGGGCCCCCCTCGAGGTCGACCACAGT	-10bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGC----		-----ATCGGGCCCCCCTCGAGGTCGACCACAGT	-10bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCG---		-----GGGCCCCCCTCGAGGTCGACCACAGT	-12bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCG---		-----GGCCCCCCTCGAGGTCGACCACAGT	-13bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTG-----		-----CGGGCCCCCCTCGAGGTCGACCACAGT	-14bp
1	TATAGGGCGAATTGGAGCTCCAC-----		-ATTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-14bp
1	TATAGGGCGAATTGGAGCTCCACCG-----		----CGATCGGGCCCCCCTCGAGGTCGACCACAGT	-15bp
1	TATAGGGCGAATTGGAGCTCCACCGCG-----		-----CGGGCCCCCCTCGAGGTCGACCACAGT	-16bp
3	TATAGGGCGAATTGGAGCTCCACCGCG-----		-----CGGGCCCCCCTCGAGGTCGACCACAGT	-17bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTG-----		-----GCCCCCCCCTCGAGGTCGACCACAGT	-17bp
1	TATAGGGCGAATTGGAGCTCCA-----		-----CGGGCCCCCCTCGAGGTCGACCACAGT	-22bp
1	TATAGGGCGAATTGGAGCTCCA-----		-----TCGACCACAGT	-39bp
1	TATAGGGCGAATTGGAGCTCC-----	+GCCGCCAGC	-----GGTCGACCACAGT	-48bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		-----	-69bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGG--		-----	-78bp
1	-----		-----GCCCCCCCCTCGAGGTCGACCACAGT	-110bp
1	-----		-----CCCCCTCGAGGTCGACCACAGT	-119bp
1	-----		-----CCCCCTCGAGGTCGACCACAGT	-160bp
1	TATAGGGCGAATTGGA-----		-----	-190bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCG---		-----	-216bp
	Clones	from	BS cells	
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		AATTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	0bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		---TCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-3bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCC		----CGATCGGGCCCCCCTCGAGGTCGACCACAGT	-4bp
4	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGG--		---TCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-5bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGC-		-ATTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-2bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGC----		AATTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-4bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGC-		---TCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-4bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGC-		----CGATCGGGCCCCCCTCGAGGTCGACCACAGT	-5bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCG---		---TCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-6bp
2	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGG--		----CGATCGGGCCCCCCTCGAGGTCGACCACAGT	-6bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGC----		--TTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-6bp
4	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCG---		----GATCGGGCCCCCCTCGAGGTCGACCACAGT	-8bp
1	TATAGGGCGAATTGGAGCTCCACCGCG-----		AATTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-9bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGC-		-----CGGGCCCCCCTCGAGGTCGACCACAGT	-9bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTGGCGG--		-----CGGGCCCCCCTCGAGGTCGACCACAGT	-10bp
1	TATAGGGCGAATTGGAGCTCCA-----	+CG	-ATTCGATCGGGCCCCCCTCGAGGTCGACCACAGT	-15bp
2	TATAGGGCGAATTGGAGCTCCACC-----		----CGATCGGGCCCCCCTCGAGGTCGACCACAGT	-16bp
1	TATAGGGCGAATTGGAGCTCCACCG-----		----GATCGGGCCCCCCTCGAGGTCGACCACAGT	-16bp
1	TATAGGGCGAATTG-----	+GTGGC	----GATCGGGCCCCCCTCGAGGTCGACCACAGT	-27bp
1	TATAGGGCGAATTGGAGCTCCACCGCGGTG-----		-----GATCGGGCCCCCCTCGAGGTCGACCACAGT	-31bp
1	TATAGGGCGAATTGGAGC-----		-----CCCCCTCGAGGTCGACCACAGT	-31bp
1	TATAGGGCGAATTGGAG-----		-----CCCCCTCGAGGTCGACCACAGT	-31bp
1	TATAGGGCGAATTGGAGC-----		-----CCCTCGAGGTCGACCACAGT	-34bp
1	TATAGG-----		-----GCCCCCCCCTCGAGGTCGACCACAGT	-41pb
1	TATAGGGCGAATTGG-----		-----CGACCACAGT	-47pb
2	-----	+CCTCCACTG	-----TCGAGGTCGACCACAGT	-62bp
1	TATAGGGCGAATTGGAGC-----		-----	-243bp
1	TATAGGGCGAATTG-----		-----	-244bp
1	TATAGGGCGAATTG-----		-----	-358bp

Supplementary material 1: Sequence analysis of the *EcoRI-NotI* DSBs repaired by NHEJ.

Forty-six and forty-three PCR products repaired by NHEJ, from normal (upper panels) and BS (lower panels) cells, respectively, were subjected to sequence analysis. The “Nb” column shows the number of clones with a given sequence recovered from either normal or BS cells. The “*NotI* site” and “*EcoRI* site” columns show all the sequences of the *NotI* and *EcoRI* sides of the DSB, respectively, that have been found. The middle column (Insertions) shows the bases that have been added at the *NotI-EcoRI* junction. The Δ column shows the total number of bp that have been deleted at the *NotI-EcoRI* junction.