

Supplementary Information

Site-selective Scission of Human Genome by Artificial Restriction DNA Cutter

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Table S1. The sequences of probes used for Southern blotting.

Probe	Sequence
Probe 1 (upstream)	5'-TCTACGGGTCACAAAAGCCTGGGTCACCCTGGTTGCCAC TGTTCTAGTTCAAAGTCTTCTTCTGTCTAATCCTTCACCCC TATTCTCGCCTTCCACTCCACCTCCCGCTCAGTCAGACTGCG CTACTTTGAACCGGA-3'
Probe 2 (downstream)	5'-AGAGCTCCACTGTTCTGGGCGAGGGCTGTGAAGAAAGA GTAGTAAGAAGCGGTAGTCGGCACCAAATCACAATGGCAA CTGATTTTTAGTGGCTTCTTTGTGGATTTTCGGAGGAGATT TTAGATCCAAAAGTTTCAGGAAGACCCTAACATGGCCCAGC A-3'
Probe used to analyze the possibility of the scission at the homologous site in chromosome 7	5'-CTTCTCTGCCCACGAGGTTCCATCACAGATAAGAAGCCA CAGGCAGCCATGCACAAATAGCCGCCAGTGGACGGGGCTC TGGGATGCTGCACCTATGTGCACCAACGCCTTCCACGCCAC TCAGTATGTTATTCTTCCAAGCTAGTGTAACCTATAAAGGAA ATTAGCCGGGTGCGGTGGCTTAT-3'



Fig. S2 The sequence which has the highest homology to the target sequence. The 15 bp in the center of the sequence are fully matching with the ARCUT.