Satellite 1 DNA sequence from genomic DNA of the giant panda *Ailuropoda melanoleuca*

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When genomic DNA from the giant panda was digested with BamH1, electrophoresed in agarose, and stained with ethidium bromide, a strong band at about 550 bp was seen above the level of background stain. There were fainter bands at about 1100 and 1700 bp. We cloned the monomer into the BamH1 site of pBR322. For sequencing by the dideoxy chain termination method, we produced a series of nested deletions after subcloning into pBluescript KS (+). The 556 bp sequence of the insert is shown in Figure 1. A Southern blot of BamH1-digested genomic DNA, when hybridized with the cloned monomer, showed bands

corresponding to the monomer and higher multimers of a tandemly repeated DNA, which we designate satellite 1. This cloned satellite sequence may be useful in comparative studies to elucidate the taxonomic position of the giant panda.

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GATCCTCCCC	AGGCCCCTAC	ACCCAATGTG	GAACCGGGGT	CCCGAATGAA	AATGCTGCTG	60
TTCCCTGGAG	GTGTTTTCCT	GGACGCTCTG	CTTTGTTACC	AATGAGAAGG	GCGCTGAATC	120
CTCGAAAATC	CTGACCCTTT	TAATTCATGC	TCCCTTACTC	ACGAGAGATG	ATGATCGTTG	180
ATATTTCCCT	GGACTGTGTG	GGGTCTCAGA	GACCACTATG	GGGCACTCTC	GTCAGGCTTC	240
CGCGACCACG	TTCCCTCATG	TTTCCCTATT	AACGAAGGGT	GATGATAGTG	CTAAGACGGT	300
CCCTGTACGG	TGTTGTTTCT	GACAGACGTG	TTTTGGGCCT	TTTCGTTCCA	TTGCCGCCAG	360
CAGTTTTGAC	AGGATTTCCC	CAGGGAGCAA	ACTTTTCGAT	GGAAACGGGT	TTTGGCCGAA	420
TTGTCTTTCT	CAGTGCTGTG	TTCGTCGTGT	TTCACTCACG	GTACCAAAAC	ACCTTGATTA	480
TTGTTCCACC	CTCCATAAGG	CCGTCGTGAC	TTCAAGGGCT	TTCCCCTCAA	ACTTTGTTTC	540
TTGGTTCTAC	GGGCTG					556

Figure 1. Sequence of a cloned monomer of satellite 1 DNA of the giant panda, Ailuropoda melanoleuca.

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