

Nucleotide sequence of a mouse minisatellite DNA

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DNA Clones corresponding to human minisatellite sequences were isolated from a BALB/c mouse genomic library. The probe used for screening was constructed based on the 17 base-pair consensus sequence reported by Jeffreys et al.(1). One of the clones isolated was sequenced providing an internally repeated sequence (Fig.1). As shown in Fig.2, that repetitive sequence probe recognizes a new family of hypervariable minisatellite sequences in mouse, allowing the establishment of original DNA fingerprints under hybridization conditions described previously (1,2).

Fig.1. nucleotide sequence of mo-1 clone.

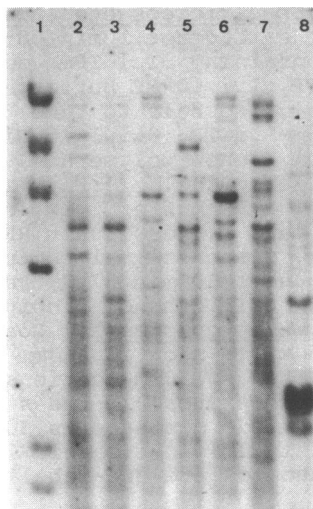
AAGTGGCATGGGAGCCTCAGCTGTGCTCTGATTGATTGGAAAGTCATC

con CTGGGCAGGGAGGA

1	CT	A
2	CT	A
3		
4		
5		
6	A	
7		
8	A	A
9		
10		
11		
12	C	
13	C	
14	C	
15		
16	C	
17	TCAA	A A
18	A	
19	AC	CA

TACTGGTTGATGTCTTCAGGACATCAATATTCCTGGTTGAAAAAAAATT

core GGTGGGCAGGAXGGGA
 :: ::::: :::
 con CTGXGCAGG GAGGA



1. λ-HindIII, 2. BALB/cDAG
 3. BALB/cArg, 4. DBA/2N, 5.
 C57BL/6J, 6. C3H/HeJ, 7. Mus
 m. molossinus 8. human

Fig.2. HaeIII-digests were probed with the mouse minisatellite, mo-1 DNA.

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REFERENCES

- 1) Jeffreys, A.J., Wilson, V. and Thein, S.L. (1985) Nature, 314, 67-73.
- 2) Jeffreys, A.J., Wilson, V., Kelly, R., Taylor, B.A. and Bulfield, G. (1987) Nucl. Acids Res., 15, 2823-2836.