Detection of a 3 allele AvaII RFLP by a single copy anonymous DNA sequence VC75 [D7S404] localized to chromosome 7

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SOURCE/DESCRIPTION: D7S404 contains a 14.32 kb human insert, isolated from a human HaeIII/AluI Charon 4A DNA genomic library.

POLYMORPHISM: AvaII (G/(AT)CC) (Amersham) identifies a three allele polymorphism with variant fragments of 4.3 (A1), 3.5 (A2) and 3.2 (A3) kb in addition to a number of constant fragments, 2.5; 2.1; 2.0; 1.75; 1.5; 0.86 kb.

FREQUENCY:

- Caucasoids (n=77):
  - A1: 0.19
  - A2: 0.71
  - A3: 0.10

- Negroids (n=47):
  - A1: 0.55
  - A2: 0.44
  - A3: not detected

- Bushman (San) (n=46):
  - A1: 0.72
  - A2: 0.28
  - A3: not detected

NOT POLYMORPHIC FOR: MspI, TaqI, BglII, SstI, StuI, PvuII, PstI, EcoRI, BamHI, HindIII, HincII, RsrII and MboI in a panel of 6-7 individuals.

CHROMOSOME LOCALIZATION: Assigned to human chromosome 7 using a panel of somatic cell hybrids.


PROBE AVAILABILITY: Contact Dr. Vera Verga. Dept Human Genetics, Univ of Michigan Medical School, Med Sci II, 1500 E. Medical Center Dr, Ann Arbor, MI 48109-0618. Also available from ATCC.

OTHER COMMENTS: A 1.35 kb EcoRI fragment can be used to detect the polymorphism.

ACKNOWLEDGMENTS: We thank the South African Medical Research Council, South African Institute for Medical Research and the University of the Witwatersrand for funding.

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