

An anonymous single-copy X-chromosome RFLP for DXS72 from Xq13-Xq22 [HGM8 provisional no. DXS72]B.J.Schmeckpeper¹, J.Davis³, H.F.Willard⁴ and K.D.Smith^{1,2}

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SOURCE AND DESCRIPTION OF CLONE: pX65H7 is a single copy 0.7 kb Hind III fragment subcloned into pBR322 from a genomic recombinant lambdaphage X65. X65 was isolated from a library of AHA-11a, a mouse-human somatic cell hybrid line containing the intact X as the only known human genetic material (Schmeckpeper *et al.* 1981).

POLYMORPHISM: Hind III (A/AGCTT) detects a two allele polymorphism with a band at 0.7 kb (A1) or 7.2 kb (A2).

FREQUENCY: A total of 44 independent X chromosomes from Caucasians, American Blacks and three established cell lines were scored:

0.7 kb allele (A1) 0.55
7.2 kb allele (A2) 0.45

NOT POLYMORPHIC FOR: EcoR I, Xba I, or Sst I with 6 X chromosomes (3 with allele 1 and 3 with allele 2).

CHROMOSOMAL LOCALIZATION: Probe localized to interval Xq13 - Xq22 using a panel of X-autosome translocation hybrids (Willard *et al.* 1985).

MENDELIAN INHERITANCE: X-linked segregation pattern observed in three small Caucasian families.

PROBE AVAILABILITY: Freely available for linkage studies.

OTHER COMMENTS: Hybridization was done in 50% formamide, 3xSSC, 10% dextran sulfate at 42°. Final wash was done in 0.1xSSC at 65°.

REFERENCES: Schmeckpeper *et al.* (1981) Nucl. Acids Res. **9**, 1853-1872.
Willard *et al.* (1985) Human Genetics, in press.

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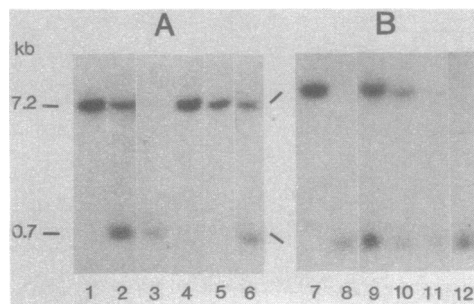


FIGURE LEGEND. A and B were two 1% agarose gels blotted to nitrocellulose and probed with ³²P-pX65H7. The DNA in each lane was 1) 46,XX; 2) 47,XXX cell line; 3) AHA-11a cell line; 4) C12D cell line, carrying a single human X; 5) 46,XY; 6) 46,XX; 7) same DNA as lane 1; lanes 8-12, different 46,XX individuals. The probe did not hybridize to mouse or Chinese hamster DNA (not shown).