An anonymous single copy X-chromosome clone DXS92, from Xq26-27, identifies two frequent RFLPs

G.Davatelis, M.Siniscalco¹ and P.Szabo

Department of Medicine, Division of Geriatrics, Cornell University Medical College - A 453, 1300 York Avenue, and ¹Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021, USA

SOURCE AND DESCRIPTION OF CLONE: DXS92 is a 3.3kb single copy HindIII fragment subcloned into pAT153 from an 8.8kb genomic insert of a phage clone isolated from a murine-human EcoRI hybrid library (vector gt7) containing most of the X-chromosome and portions of chromosome 2 as the only human DNA.

POLYMORPHISM: TaqI (TCGA) identifies a three allele polymorphism with bands at 3.8kb (A1), 7.1kb (A2), and 3.5kb (A3). DXS92 also identifies a two allele HindIII (AAGCTT) polymorphism with bands at 5.5kb (B1) and 9.5kb (B2).

FREQUENCY: For 37 unrelated people for TaqI, 19 males/18 females: 3.8kb allele (A1) 0.74; 7.1kb allele (A2) 0.24; 3.5kb allele (A3), one person only, 0.02.

For 12 unrelated Sardinian males for HindIII, 5.5kb allele (B1) 0.50; 9.5kb allele (B2) 0.50.

CHROMOSOMAL LOCALISATION: Probe localised to Xq26-Xq27 by in situ hybridisation.

MENDELIAN INHERITANCE: X-linked segregation pattern for A1/A2 and B1/B2 observed in several CEPH pedigrees, with families numbered 35, 28, 1331 and 1345 being informative.

PROBE AVAILABILITY: Available now for collaborators.

OTHER COMMENTS: DXS92 is apparently above fragile site (FraXq27.3) as observed by in situ hybridisation.

REFERENCE: Davatelis et al., HGM8

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