Highly polymorphic locus D15S24 (CMW-1) maps to 15pter-q13. [HGM9 provisional no. D15S24]

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SOURCE AND DESCRIPTION OF CLONE: CMW-1, containing a 3.8kb Eco RI fragment, was isolated from a flow sorted library cloned in Charon 21A from the Los Alamos National Laboratory (LA15NS02). The 3.8kb fragment has also been inserted into the Eco RI site of pUC18.

POLYMORPHISMS: Eco RI and Taq I reveal a multi-allele (>6) system with bands between 3.0 kb and 4.2 kb and 1.5 kb and 2.5 kb, respectively. D15S24 is also polymorphic with the following enzymes: Msp I, Ban II, Bgl I, Bgl II, BST EII, Sac I, Pst I, Eco RV, Pvu II, Apa I, Dra I, Kpn I, and Bst NI.

FREQUENCIES: Heterozygosity of 85% in 32 individuals.

NOT POLYMORPHIC FOR: Sca I, Xba I in 6 unrelated individuals.

CHROMOSOMAL LOCALIZATION: D15S24 maps to chromosome 15, region 15pter-q13, using a somatic cell hybrid regional mapping panel.

MENDELIAN INHERITANCE: Co-dominant segregation shown for alleles detected with Eco RI and Taq I in two informative Caucasian families totaling 17 individuals.

PROBE AVAILABILITY: Available without restriction.

OTHER COMMENTS: Coordinate variation using multiple enzymes suggests that CMW-1 detects a variable number of tandem repeats (VNTR, Nakamura et al., 1987).

REFERENCES: Nakamura et al., Science 235: 1616, 1987.

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