Cosmid 128 defines three RFLPs on chromosome 17q23-qter. [HGM9 no. D17S77]

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SOURCE AND DESCRIPTION OF CLONES. Cosmid 128 was isolated from a chromosome 17 specific genomic library. Single-copy subclones E1, E5 and B10 (with sizes of 1.9, 1.3, and 0.7 kb respectively) were Sau 3A fragments of the cosmid cloned into the BamHI site of pUC18.

POLYMORPHISMS: With subclone E1, TaqI identifies constant bands of 2.1 and 1.4 kb and a 2-allele RFLP with A1=3.5, A2=2.4 kb.

With subclone E5, MspI identifies a constant band of 2.2 kb and a 2-allele RFLP with B1=1.55, B2=1.25kb.

With subclone B10, MspI identifies a 2-allele RFLP with C1=1.3, C2=1.0 kb

FREQUENCIES: Studied 78 European Caucasians.
A1=.28, A2=.72; B1=.33, B2=.67; C1= .58, C2=.42

CHROMOSOMAL LOCALIZATION: 17q23-qter, by use of cell hybrid panel.

MENDELIAN INHERITANCE: Codominant inheritance has been shown for each of the three RFLPs in at least 2 informative families with a total of at least 14 children.

PROBE AVAILABILITY: Will be available from ATCC.

OTHER COMMENTS: All eight expected haplotypes have been observed, with frequencies ranging from 0.05 to 0.33. Of 48 individuals typed for all three RFLPs, 41 (85%) were heterozygous for one or more of the RFLPS.

REFERENCE: Vissing H, Grosveld F, Solomon E, Moore G, Lench N, Shennan N, Williamson R (1987) Nucleic Acid Research 15:1363-1376.

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