A HindIII polymorphism identified by the human early growth response gene 2 (EGR2) on chromosome 10

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SOURCE/DESCRIPTION: Zap32 is a 3 kb full-length cDNA fragment for human early growth response gene 2 (EGR2) cloned into the EcoR I site of the Stratagene vector SKM13(-)(1).

POLYMORPHISM: Hind III detects a simple two-allele polymorphism with bands at either 8.0 kb(Al) or 5.6 kb and 2.4 kb(A2). No constant bands were detected.

FREQUENCY: Estimated from 58 unrelated caucasians.

A1: 0.90 A2: 0.10

NOT POLYMORPHIC FOR: Apa I, BamH I, Ban II, Bgl I, Bgl II, BstE II, Dra I, EcoR I, EcoR V, Hinc II, Msp I, Pst I, Pvu II, Rsa I, Sac I, and Taq I in 10 unrelated individuals.

 $\begin{array}{c} \textbf{CHROMOSOME LOCALIZATION:} & \textbf{The human early growth response gene 2 (EGR2)} \\ \textbf{was localized to } 10q21-22 & \textbf{by in situ hybridization (1) and this chromosomal assignment has been confirmed by preliminary linkage data showing lod scores greater than 4 with each of the known chromosome 10 markers RBP3, D10S5, D10S3, and D10S1. \\ \end{array}$

MENDELIAN INHERITANCE: Co-dominant segregation of the Hind III RFLP was observed in four large kindreds with a total of more than 350 individuals.

PROBE AVAILABILITY: Contact V. P. S.

OTHER COMMENTS: All bands were clearly visible under normal hybridization and wash stringencies, but the 2.4 kb band is fainter than the others.

REFERENCE: 1. L. Joseph et al., PNAS, USA. (in press, 1988).