BamHI RFLP for the GHRHR locus

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Source/Description: HPR3Z is a 1.6 kb human growth hormone releasing hormone (GHRH) receptor cDNA clone described by Mayo (1) inserted into pGEM7Z. Sense: cut with HindIII, use SP6; antisense: cut BamHI, use T7 polymerase.

Polymorphism: BamHI identifies a two allele polymorphism with bands either at 2.6 kb (A1) or 2.4 kb (A2) and an invariant band at 8.5 kb.

Frequency: Studied in 48 unrelated healthy Caucasians.

A1 = 0.72

A2 = 0.28

Calculated heterozygosity = .40.

Not Polymorphic For: EcoRI, PvuII, PstI, BgII, BgIII, BcII, HindIII, HincII, MspI and FocI.

Chromosomal Localisation: Human GHRH receptor (GHRHR) has been mapped to chromosome 7p14 (2).

Mendelian Inheritance: Co-dominant inheritance of alleles A1 and A2 was observed in 29 individuals from 5 families.

Probe Availability: Probe available on request from K.E.Mayo, Department of Biochemistry, Molecular Biology, and Cell Biology, Northwestern University, Evanston, IL 60208, USA.

Acknowledgements: This work was supported by grants from Swiss National Science Foundation (32-33535.92) and Pharmacia (Switzerland). We thank K.E.Mayo for supplying the HPR3Z probe.

References: 1) Mayo, K.E. (1992) Mol. Endocrinol. 6, 1734-1744. 2) Gaylinn, B.G., von Kap-Herr, C., Golden, W.L. and Thorner, M.O. (1994) Genomics 19, 193-195.

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