An SstI polymorphism for the human muscarinic acetylcholine receptor gene, m4 (CHRM 4)

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SOURCE/DESCRIPTION: The probe is HH8p3, a 2.3 kb SacI/EcoRI genomic fragment subcloned in pUC18. The small clone contains the entire coding region and an artifical EcoRI site 360 bp 3' of the termination codon.

POLYMORPHISM: SstI identifies two allelic fragments at 3.5 kb and 3.2 kb. No other bands are detected.

FREQUENCY: As determined from 19 unrelated North American Caucasians.

Allele 3.5 kb = 0.1
Allele 3.2 kb = 0.9

NOT POLYMORPHIC FOR: 32 enzymes including BamHI, BclI, BglI, BglII, BstNI, DdeI, DraI, Eco0109, EcoRI, EcoRV. EcoT221, HincII, HindIII, HinfI, HphI KpnI, Mb01, MboII, MspI, NcoI, NdeI, PstI, PvuII, RsaI, Sau961, ScaI, ScrfI, StuI, TaqI, Tth111I, XbaI and XmnI.

CHROMOSOMAL LOCALIZATION: The gene maps to 11p.

MENDELIAN INHERITANCE: Codominant segregation of the SstI RFLP in three three-generational families.

PROBE AVAILABILITY: T. I. Bonner

REFERENCE: Bonner, T. I., et al., Science 237: 527, 1987.

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