RFLP for a DNA clone which maps to 19q13.2 – 19qter (D19S63)*

J.D.Brook, H.G.Harley, S.A.Rundle, K.V.Walsh and D.J.Shaw

Institute of Medical Genetics, University of Wales College of Medicine, Heath Park, Cardiff CF4 4XN, Wales, UK

Source/Description: pD10 is a 0.85kb fragment with BamHI ends cloned in pSP64. It was sub-cloned from λD10 which was isolated from a genomic library constructed in λEMBL3 from a rodent human somatic cell hybrid (Stallings *et al.*, 1988).

Polymorphism: A 3-allele polymorphism is detected with either PstI or PvuII.

Frequency: Studied in 80 unrelated individuals.

7.1kb = 0.58

6.8kb = 0.27

6.5kb = 0.15

Not Polymorphic For: BanI, BglII, DraI, HinfI, TaqI, XbaI.

Chromosomal Localisation: Probe localises to 19q13.2 – 19qter on a panel of rodent human somatic cell hybrids.

Mendelian Inheritance: Co-dominant segregation shown in 32 families, 280 individuals.

Probe Availability: Available for collaborative work on Myotonic Dystrophy. Freely available for other studies.

Other Comments: Wash to 0.1×SSC at 65°C for 30 mins. The probe also detects a 2 allele polymorphism with HincII.

References: Stallings *et al.* (1988) *Am. J. Hum. Genet.* **43**, 144–151. Brook *et al.* (1987) *Genomics* **1**, 320–328.

Acknowledgements: This work was supported by the Muscular Dystrophy Group of Great Britain and the Muscular Dystrophy Association, USA.

Two RFLPs detected by a cosmid at locus D16S144

Terry J.Lerner¹, Eric Arn¹, Mary Ann Anderson¹, Katherine W.Klinger¹, David F.Callen² and Rudolph E.Tanzi³

¹Integrated Genetics, Inc., 1 Mountain Road, Framingham, MA 01701, USA, ²Adelaide Children's Hospital, North Adelaide, SA 5006, Australia, ³Neurogenetics Laboratory, Massachusetts General Hospital and Harvard Medical School, Boston, MA 02114, USA

Source/Description: A cosmid clone isolated by screening a total human cosmid library (Stratagene) using the lom2b cDNA (1) as probe.

Polymorphism: BclI: 20 kb (A1)
14 + 6 kb (A2)
numerous constant bands
HindIII: 5.8 kb (A1)
4 + 1.8 kb (A2)
numerous constant bands.

Frequency: BclI (16 unrelated Caucasians): A1 = 0.66
A2 = 0.34

HindIII (20 unrelated Caucasians): A1 = .975
A2 = .025

Not Polymorphic For: XbaI, SacI, EcoRI, BglII, BamHI, TaqI, PstI, EcoRV, XmnI, BstEII, MspI, PvuII, StuI.

Chromosomal Location: 16p13.3 – 16p13.11 by hybridization to a somatic cell hybrid panel of chromosome 16 (2).

Mendelian Inheritance: Inheritance of the BclI RFLP was demonstrated in six two-generation families. Inheritance of the rare HindIII RFLP was demonstrated in a single two-generation Mennonite family.

Probe Availability: For collaborative studies. Contact T.Lerner.

Other Comments: The cosmid probe requires prehybridization with excess human placental DNA. Stringencies of hybridization and post-hybridization washes are normal.

References: 1) Harris, P.C., Reeders, S.T., Lehmann, O.J. and Tanzi, R.E. (1989) *Cytogenetics and Cell Genetics* **51**, 1011. 2) Callen, D.F., Hyland, V.J., Baker, E.G., Fratini, A., Gedeon, A.K., Mulley, J.C., Fernandez, K.E.W., Breuning, M.H. and Sutherland, G.R. (1989) *Genomics* **4**, 348–354.