The cDNA of the human neuromedin B gene (NMB) mapped to 15q11-qter recognizes an XbaI RFLP

C.A.Gregory and J.S.Schwartz

Department of Human Genetics, Faculty of Medicine, University of Manitoba, 770 Bannatyne Avenue, Winnipeg, Manitoba R3E 0W3, Canada

Source/Description: The probe pcNMB is a cDNA of the human neuromedin B gene (NMB) (1). The NMB cDNA has been cloned into the EcoRI site of pGEM-3. The entire cDNA insert (638 bp) may be excised with EcoRI.

Polymorphism: An XbaI two-allele polymorphism is detected with pcNMB.

Frequency: Allele frequencies were determined by typing 20 unrelated Caucasians

Enzyme	Allele	Size	Frequency
XbaI	A1	22.0 Kb	0.3
	A2	20.0 Kb	0.7

Not Polymorphic For: EcoRI, HindIII, XmnI, BglI, PstI, PvuII, MspI, TaqI, BamHI, RsaI, or ScaI.

Mendelian Inheritance: Codominant inheritance demonstrated in 2 Caucasian families with 9 members.

Chromosomal Localization: The human NMB gene maps to 15q11-qter (1).

Probe Availability: Dr Ian M.Krane, Division of Genetics, Department of Medicine, Howard Hughes Medical Institute, Brigham and Women's Hospital, 75 Francis St, Boston, MA 02115, USA

Other Comments: Analysis of Prader-Willi syndrome (PWS) patients using the pcNMB cDNA has revealed that it is not within the Prader-Willi syndrome chromosome region (PWCR).

Acknowledgement: Supported by the Medical Research Council of Canada.

Reference: Krane *et al.* (1988) *J. Biol. Chem.* **263**, 13317–13323.

A BglII RFLP at the human prolactin gene locus on chromosome 6 (PRL)

Y.Myal*, G.E.DiMattia⁺, C.A.Gregory¹, H.G.Friesen, J.L.Hamerton¹ and R.P.C.Shiu

Departments of Physiology and ¹Human Genetics, Faculty of Medicine, University of Manitoba, 770 Bannatyne Avenue, Winnipeg, Manitoba R3E 0W3, Canada

Source/Description: The probe is a 5' EcoRI fragment (203 bp) of the human pituitary prolactin (hPRL) cDNA, containing exons 1 and 2 (1).

Polymorphism: BglII digestion of genomic DNA and hybridization with the hPRL cDNA probe detects a 2 allele polymorphism (see fig. below) with allelic fragments of 3.5 kb (allele 1) and 2.5 kb (allele 2). A constant band of 1.8 kb is present.

Frequency: Studies 26 unrelated Caucasians.

Allele	Size	Frequency
A1	3.5 kb	0.7
A2	2.5 kb	0.3

Not Polymorphic For: XbaI, EcoRV, HindIII, PstI, EcoRI, HincII and NcoI.

Chromosomal Location: Human PRL gene has been assigned to 6 (p23–p21.1) by *in situ* hybridization (2).

Mendelian Inheritance: Codominant segregation observed in 3 Caucasian families (29 individuals).

Probe Availability: ATCC.

Other Comments: The RFLP was first detected using an 800 bp full length human decidual PRL cDNA (8B) probe (3).

Acknowledgement: This work was supported by the Medical Research Council of Canada.

References: 1) Cooke, N. *et al.* (1981) *J. Biol. Chem.* **256**, 4007. 2) Taggart, R.T. *et al.* (1987) *Cytogenet. Cell Genet.* **46**, 701. 3) DiMattia, G.E. *et al.* (1990) *J. Biol. Chem.* **265**, 16412.

* To whom correspondence should be addressed

⁺ Present Address: Eukaryotic Regulatory Biology Program, University of California, San Diego School of Medicine, CMM Rm 345, 9500 Gilman Drive, La Jolla, CA 92093, USA