

## A new polymorphic probe on chromosome 22: NB17 (D22S181)

R.H.Lekanne Deprez\*, N.A.van Biezen, P.Heutink<sup>1</sup>, K.R.G.S.Boejharat, A.de Klein<sup>2</sup>, A.H.M.Geurts van Kessel<sup>3</sup> and E.C.Zwarthoff

Departments of Pathology, <sup>1</sup>Clinical Genetics and <sup>2</sup>Cell Biology and Genetics, Erasmus University and

<sup>3</sup>Department of Human Genetics, University of Nijmegen, The Netherlands

**Source/Description:** NB17 is a 0.7 kb HindIII-EcoRI fragment isolated from two pooled chromosome 22 specific libraries (ATCC # 57733 and ATCC # 57714) and was subcloned into pUC9.

**Polymorphism:** BglII or TaqI digestion of genomic DNA and hybridization with the probe detects a two allele polymorphism: BglII (A1: 12.5 kb, A2: 4.0 kb) with a constant band at 3.0 kb; TaqI (B1: 2.9 kb, B2: 2.2 kb). The polymorphisms detected with these two enzymes are almost in complete linkage disequilibrium.

**Frequency:** Estimated from 92 (BglII) and 95 (TaqI) unrelated Caucasians.

A1: 0.69      B1: 0.65  
A2: 0.31      B2: 0.35

**Not Polymorphic For:** BglI, DraI, MspI and PstI.

**Chromosomal Localization:** Regional localization was established by hybridization to a panel of somatic cell hybrids: PgMe-25Nu, containing only human chromosome 22; PgMo-22 and ICB-17ANu, respectively containing both products of the Philadelphia translocation at 22q11; A3EW2-3B, containing the t(11;22) from Ewing's sarcoma (at 22q12) and 1/22 AM27 containing a t(1;22) at 22q13 (1, 2). The probe was assigned to chromosome 22 between 22pter and 22q11.

**Mendelian Inheritance:** Mendelian inheritance has been demonstrated in extended pedigrees of Gilles de la Tourette syndrome families (n = 380).

**Probe Availability:** Available for collaboration.

**References:** 1) Goyns, M.H., Young, B.D., Geurts van Kessel, A., de Klein, A., Grosveld, G., Bartram, C.R. and Bootsma, D. (1984) *Leukemia Res.* **8**, 547-553. 2) Geurts van Kessel, A., Turc-Carel, C., de Klein, A., Grosveld, G., Lenoir, G. and Bootsma, D. (1985) *Mol. Cell Biol.* **5**, 427-429.

\*To whom correspondence should be addressed at Department of Pathology, Erasmus University, PO Box 1738, 3000 DR Rotterdam, The Netherlands

## A new polymorphic probe on chromosome 22: NB35 (D22S182)

R.H.Lekanne Deprez\*, N.A.van Biezen, P.Heutink<sup>1</sup>, K.R.G.S.Boejharat, A.de Klein<sup>2</sup>, A.H.M.Geurts van Kessel<sup>3</sup> and E.C.Zwarthoff

Departments of Pathology, <sup>1</sup>Clinical Genetics and <sup>2</sup>Cell Biology and Genetics, Erasmus University and

<sup>3</sup>Department of Human Genetics, University of Nijmegen, The Netherlands

**Source/Description:** NB35 is a 0.8 kb HindIII-EcoRI fragment isolated from two pooled chromosome 22 specific libraries (ATCC # 57733 and ATCC # 57714) and was subcloned into pUC9.

**Polymorphism:** BglII digestion of genomic DNA and hybridization with the probe detects a two allele polymorphism: 8.7 kb (A1) and 8.0 kb (A2). No constant bands were present.

**Frequency:** Estimated from 96 unrelated Caucasians.  
A1: 0.76 A2: 0.24.

**Not Polymorphic For:** BglI, DraI, MspI, PstI and TaqI.

**Chromosomal Localization:** Regional localization was established by hybridization to a panel of somatic cell hybrids: PgMe-25Nu, containing only human chromosome 22; PgMo-22 and ICB-17ANu, respectively containing both products of the Philadelphia translocation at 22q11; A3EW2-3B, containing the t(11;22) from Ewing's sarcoma (at 22q12) and 1/22 AM27 containing a t(1;22) at 22q13 (1, 2). The probe was assigned to chromosome 22 between 22pter and 22q11.

**Mendelian Inheritance:** Mendelian inheritance has been demonstrated in extended pedigrees of Gilles de la Tourette syndrome families (n = 380).

**Probe Availability:** Available for collaboration.

**References:** 1) Goyns, M.H., Young, B.D., Geurts van Kessel, A., de Klein, A., Grosveld, G., Bartram, C.R. and Bootsma, D. (1984) *Leukemia Res.* **8**, 547-553. 2) Geurts van Kessel, A., Turc-Carel, C., de Klein, A., Grosveld, G., Lenoir, G. and Bootsma, D. (1985) *Mol. Cell Genet.* **5**, 427-429.

\*To whom correspondence should be addressed at Department of Pathology, Erasmus University, PO Box 1738, 3000 DR Rotterdam, The Netherlands