The human tyrosine kinase gene (FER) detects an RFLP with BglI

B.Bapat, J.Groffen¹ and P.N.Ray

Department of Genetics, Research Institute, The Hospital for Sick Children, Toronto, Ontario M5G 1X8, Canada and ¹Department of Pathology, Children's Hospital of Los Angeles, Los Angeles, CA 90027, USA

Source/Description: A 2.3 kb EcoRI repeat free genomic DNA fragment of the human tyrosine kinase gene subcloned into pUC18 vector (1) was used as a probe.

Polymorphism: BglI identifies a two allele polymorphism with bands at either 9.5 kb (A1) or 3.6 kb (A2).

Constant Bands: None.

Frequency: Studied in 57 unrelated healthy Caucasians (North America)

A1 = 0.88

A2 = 0.12

Not Polymorphic For: EcoRI, BglII, BamHI, HindIII, Asp700, TaqI, MspI, RsaI and PstI.

Chromosomal Localization: The human tyrosine kinase gene has been localized to chromosome 5q21–22 by in situ hybridization technique (1).

Mendelian Inheritance: Co-dominant inheritance shown in 10 Caucasian families.

Probe Availability: Contact J.Groffen.

Reference: 1) Morris *et al.* (1990) *J. Cytogenet. Cell Genet.* **53**, 196–200.

A new DNA marker, D6S129, identifies a HindIII polymorphism on chromosome 6q

B.C.Byth, D.R.Love, M.R.Passos-Bueno¹ and K.E.Davies*

Molecular Genetics Group, Institute of Molecular Medicine, John Radcliffe Hospital, Headington, Oxford OX3 9DU, UK and ¹Instituto de Biociencias, Universidade de Sao Paulo, Sao Paulo, Brazil

Source/Description: The probe Bfm7 (D6S129) is a 900 bp EcoRI–BamHI fragment cloned into pUC18 and originally isolated from a human foetal muscle cDNA library.

Polymorphism: Bfm7 detects two HindIII alleles of 10 kb (A1) and 3.7 kb (A2), and constant bands at 12 kb, 10 kb, 5.5 kb, 5.0 kb, 3.3 kb, 2.5 kb, 2.2 kb and 1.6 kb (see below).

Frequency: Estimated from 45 Caucasians

A1: 0.73

A2: 0.27

Chromosomal Localisation: The probe has been localised to 6q21–qter using somatic cell hybrids.

Mendelian Inheritance: Mendelian inheritance has been demonstrated in a large number of two and three generation pedigrees.

Comments: The constant bands detected by this probe are only observed at low washing stringency (3×SSC/0.1% SDS, 65°C); at higher stringency (0.1×SSC/0.1% SDS, 65°C) only three constant bands and the two alleles are seen (Fig. 1).

Probe Availability: Available for collaboration.

Southern blot of Hind III digested human DNA probed with Bfm7 demonstrating the effect of washing stringency on the observed pattern.

* To whom correspondence should be addressed