Two RFLPs associated with the human endogenous retroviral element S71 on chromosome 18q21C. Leib-Mösch, D. Barton¹, E.-M. Geigl, R. Brack-Werner, V. Erfle, R. Hehlmann² and U. Francke¹

GSF, Abteilung für Molekulare Zellpathologie, D-8042 Neuherberg, FRG, ¹Department of Human Genetics, Yale University School of Medicine, PO Box 3333, New Haven, CT 06520, USA and ²III. Med. Klinik Mannheim der Universität Heidelberg, D-6800 Mannheim 1, FRG

SOURCE AND DESCRIPTION OF CLONE: A 3 kb fragment containing the pol-3' LTR region of the human endogenous retroviral sequence S71 (1) was subcloned into the HindIII-BamHI site of pUC9 and was designated pS71BH3.

POLYMORPHISMS: EcoRI identifies two allelic fragments of 13.5 and 6.8 kb. BglII detects two allelic fragments of 11.0 and 6.0 kb.

FREQUENCIES:

EcoRI (38 unrelated Caucasians) A1 (13.5 kb) 0.72, A2 (6.8 kb) 0.28
BglII (16 unrelated Caucasians) A1 (11.0 kb) 0.53, A2 (6.0 kb) 0.47

NOT POLYMORPHIC FOR: (Number of unrelated Caucasian individuals is shown in parenthesis) AccI (5), ApaI (5), BamHI (6), BglI (12), HindIII (10) KpnI (6), PstI (17), SacI (7), TaqI (5), XbaI (5).

CHROMOSOMAL LOCALIZATION: S71 was mapped to chromosome 18q21 by somatic cell hybrids and in situ hybridization (2).

MENDELIAN INHERITANCE: Co-dominant inheritance was demonstrated for the EcoRI RFLP in two three-generation families with 7 and 8 (Fig. 1) members.

PROBE AVAILABILITY: Contact C. Leib-Mösch or R. Brack-Werner

OTHER COMMENTS: High stringency hybridization conditions are required because of cross-hybridization with related human endogenous retroviral sequences located on other autosomes.

REFERENCES: (1) Leib-Mösch et al. (1986) Virology 155, 666-677.
(2) Brack-Werner et al. (1988) Genomics 4, 68-75.

ACKNOWLEDGEMENTS: This work was supported by the Deutsche Forschungsgemeinschaft (SFB 324) and NIH research grant GM 26105 (to U.F.).

Figure 1