

RFLP for TaqI at the human tyrosinase locusR.Spritz, K.Strunk, W.Oetting¹ and R.King¹Laboratory of Genetics, University of Wisconsin, Madison, WI 53706 and ¹Institute of Human Genetics, University of Minnesota, Minneapolis, MN 55455, USA

SOURCE/DESCRIPTION: A 1.4-kb EcoRI-PstI fragment from the mouse tyrosinase cDNA plasmid pTyrs-33 containing virtually the complete coding sequence.

POLYMORPHISM: TaqI identifies a two-allele polymorphism with fragments of either 2.8 kb or 2.4 kb that contain most of the tyrosinase coding region. Three weak (1.4 kb, 0.9 kb, and 0.6 kb) and two very weak (5.0 and 3.2 kb) constant bands are also seen.

FREQUENCY: Estimated from 21 unrelated Caucasians.
2.8-kb fragment 0.52
2.4-kb fragment 0.48

NOT POLYMORPHIC FOR: EcoRI, HindIII, MspI, PstI, and PvuII.

CHROMOSOMAL LOCALIZATION: The human tyrosinase gene has been regionally mapped to 11q14->21, and a weakly cross-hybridizing "tyrosinase-related sequence" mapped to 11p11.2->cen (2).

MENDELIAN INHERITANCE: Codominant segregation has been shown in two families.

PROBE AVAILABILITY: pTyrs33 was supplied by Dr. T. Takeuchi (1).

OTHER COMMENTS: The RFLP was observed under normal hybridization and wash conditions.

REFERENCES:

1. Yamamoto, H. *et al.* (1987). *Jpn. J. Genet.* 62:271-274.
2. Barton, D. *et al.* (1988). *Genomics*, in press.

ACKNOWLEDGEMENT: Aided by Clinical Research Grant No. 6-408 from the March of Dimes Birth Defects Foundation.

