

## Population and formal genetics of the STR system MBP - locus B - in North Portugal

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**System and locus:** MBPB, myelin basic protein, locus B (18q22-qter)

**Population and sample size:** North Portugal; N=109

### Methods

Samples: blood or buccal swabs from unrelated individuals and mother/child pairs.

DNA extraction: method of Lareu *et al.* (1994)

Primers: Polymeropoulos *et al.* (1992)

Amplification conditions: 5 min at 93°; 94°: 1 min; 62°: 0.5 min; 72°: 1 min; 27-35 cycles.

Electrophoresis: according to Luis and Caeiro (1995); silver staining: Budowle *et al.* (1992). Genotyping was performed by side-by-side comparison with an allelic ladder made up from previously typed samples.

### Results:

#### Observed Genotypes

Genotypes	Obs.	Genotypes	Obs.	Genotypes	Obs.
7-7	17	7-13	1	10-11	6
7-9	4	9-9	1	10-12	3
7-10	11	9-10	1	11-11	15
7-11	21	9-11	3	11-12	15
7-12	6	10-10	2	12-12	3

P=0.5

#### Allele frequencies

Allele	Freq.	Allele	Freq.	Allele	Freq.
7	0.353	10	0.115	12	0.138
9	0.045	11	0.344	13	0.005

### Comments:

Observed genotype distribution does not deviate significantly from Hardy-Weinberg expectations. The difference between observed (0.65) and expected (0.72) heterozygosities are also non-significant ( $\chi^2=2.7$ , 1df, P=0.10).

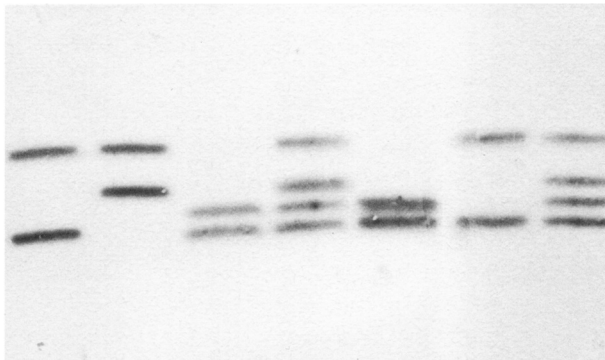
Estimated allele frequencies in our sample are similar to those reported for Germany (Möller *et al.* 1994).

In 59 mother-child pairs analysed, an exclusion (mother 7-7/child 11-11) was observed. This finding is in accordance with the results presented by Möller *et al.* (1994), demonstrating that this system must be used with care for forensic purposes.

## References

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**Acknowledgements:** This work was partially supported by JNICT (Junta Nacional de Investigação Científica e Tecnológica, BD/2849/93-ID and PBIC/C/CEN/1174/92) and CNCDP (Comissão Nacional para as Comemorações dos Descobrimentos Portugueses, research contract nº 70).



**MBP-B genotypes after polyacrylamide electrophoresis of the amplified fragments.** From left to right: lane 1: 7-11; lane 2: 7-9; lane 3: 10-11; lane 4: ladder; lane 5: 10-11; lane 6: 7-11; lane 7: ladder.