

Genetic polymorphisms of Alpha-1-Antitrypsin and Group-Specific Component in Spanish Gypsy population.

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SERUM PROTEINS

Alpha-1-Antitrypsin (Pi) and Group-Specific Component (Gc).

POPULATION AND SAMPLE SIZE

Gypsies (Basque Country, Spain). N:165.

METHODS

Isoelectric focusing (IEF) in polyacrylamide gels: Allen y cols. (1974) for Pi and Hoste (1979) for Gc.

Interpretation of the results: direct staining (Coomassie Blue) for Pi and by precipitation for Gc.

RESULTS

The phenotypic distribution at all the loci was at Hardy-Weinberg equilibrium.

Observed genotypes for Pi (Table 1):

Gen.	Obs.	Gen.	Obs.	Gen.	Obs.	Gen.	Obs.
M1M1	105	M1S	18	M2M3	1	M2F	1
M1M2	18	M1F	3	M2S	3	M3M3	2
M1M3	6	M2M2	7	M2Z	1		

Observed genotypes for Gc (Table 2):

Gen.	Obs.	Gen.	Obs.	Gen.	Obs.
1S 1S	42	1S 2	54	1F 2	17
1S 1F	27	1F 1F	4	2 2	21

Allele frequencies for Pi (Table 3):

Allele	Frequency	Allele	Frequency	Allele	Frequency
M1	0.7727273	M3	0.0333333	Z	0.0030303
M2	0.1151515	S	0.0636364	F	0.0121212

Test P: $0.10 > p > 0.05$

Allele frequencies for Gc (Table 4):

Allele	Frequency	Allele	Frequency	Allele	Frequency
1S	0.5	1F	0.1575758	2	0.3424242

Test P: $p > 0.95$

COMMENTS

In this population, a high proportion of homozygosis stood out for the phenotype M1M1 (Pi). We also found a very high frequency for the allele F (Pi), the highest known among the frequencies studied up to the present time (1.2%).

This data may be used for paternity diagnosis and may contribute to studies regarding the gypsies in the world, as an ethnic group, since it is widely extended population, in all countries and in all continents.

REFERENCES

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