Frequencies of the human immunoglobulin IGHA2*M1 and IGHA2*M2 alleles corresponding to the A2m(1) and A2m(2) allotypes in the French, Lebanese, Tunisian and Black African populations

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SOURCE/DESCRIPTION : IGHA ($C\alpha$) probe, α 2XP8 (1) which detects the non-polymorphic PstI fragments of 1.2 and 2 kb, corresponding respectively to the IGHA1 and IGHA2 genes (1,2).

POLYMORPHISM : Double digest PstI + EcoRI identifies the allelic fragments IGHA2*M1 (2 kb) and IGHA2*M2 (0.9 kb), corresponding to the A2m(1) and A2m(2) allotypes, respectively (2)

FREQUENCY :

Populations	<u>IGHA2*M1</u>	<u>IGHA2*M2</u>
French (62)	0.98	0.02
Lebanese (58)	0.79	0.20
Tunisians (44)	0.84	0.16
Black Africans (34)	0.32	0.68

Between brackets, number of alleles

CHROMOSOMAL LOCALISATION : 14q32

MENDELIAN INHERITANCE : Co-dominant segregation (see reference 2)

PROBE AVAILABILITY : Available from Dr. T.H. Rabbitts

OTHER COMMENTS : The frequencies of the IGHA2*M1 and *M2 allelic fragments in the Tunisian and Lebanese samples can be explained by a Negroid contribution in their gene pools, and also an Oriental admixture in the Lebanese population, as demonstrated by other genetic markers.

REFERENCES : (1) Flanagan J.G., Rabbitts T.H. (1982) Nature 300, 709-713
(2) Lefranc M.-P., Rabbitts T.H. (1984) Nucl. Acids Res. 12, 1303-1311

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