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Human- specific *Alu* Insertion/Deletion Polymorphisms in Various Population Groups of Jammu Region

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ABSTRACT In present study, six *Alu* insertion/deletion polymorphisms (*Alu* ACE, *Alu* APO, *Alu* PV-92, *Alu* PLAT, *Alu* FXIIB and *Alu* D1) were studied in five different populations (Brahmins, Rajputs, Scheduled Castes, Gujjars and Jat Sikhs) of Jammu region. Blood samples were collected randomly from 400 unrelated healthy individuals. DNA was extracted and amplified by PCR using six target specific Oligonucleotide primers of *Alu* family and finally subjected to Agarose gel electrophoresis. Allele frequencies were used to calculate average heterozygosity. All the six markers were found to be highly polymorphic with high heterozygosity values. The genetic distance analysis revealed a close genomic affinity between Schedule Castes and *Jat* Sikhs suggesting recent diversification of these two population groups whereas *Gujjars* and Brahmins stood apart genetically.