

© IJHG 2021 PRINT: ISSN 0972-3757 ONLINE: ISSN 2456-6330 Int J Hum Genet, 21(3): 110-118 (2021) DOI: 10.31901/24566330.2021/21.03.784

Distribution of Human-specific *Alu* InDel Polymorphisms in the Brahmin and Rajput Populations of Kangra District of Himachal Pradesh, North India

Dheeraj Jamwal, S.M.S. Chahal*, Manju Bala, Anu Raina and Vasundhara Raina

Department of Human Genetics, Punjabi University, Patiala 147 002, Punjab, India

KEYWORDS Caste Populations. DNA Polymorphisms. Genetic Markers. Kangra

ABSTRACT The genetic constitution of two endogamous caste populations viz., the Brahmin (n=250) and Rajput (n=250) of Kangra district of the North Indian state of Himachal Pradesh was studied using six autosomal *Alu* InDel (insertion/deletion) markers viz., ACE, APO, PV92, CD4, PLAT, and TPA25. All markers were found to be polymorphic. Except for *Alu* APO and PV92 in the Rajput, genotype frequencies of other markers were in the Hardy-Weinberg equilibrium in both the populations. The average heterozygosity (*H*) was observed higher in the Brahmin (0.4134) compared to the Rajput (0.3809) and the degree of genic differentiation was low between them (G_{ST} =0.00898). The genetic distance analysis revealed close genetic affinities of the present Rajput population with the Gaddi Rajput and Gaddi Brahmin populations reported earlier from the district but the present Brahmin population was found distant from them.