

**Polymorphism of Codon 447 Calcitonin Receptor Gene
in North Indians**

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KEY WORDS SNP; genetic polymorphism; CTR gene; codon 447 polymorphism

ABSTRACT A C/T polymorphism at 1340 nucleotide of the human calcitonin receptor gene is present in the coding region and changes an amino acid at codon 447 from leucine to proline. This genetic variation has been of great interest due to its possible association with polygenic diseases like osteoporosis and calcium oxalate urolithiasis. Allele frequencies of the C/T 1340 polymorphism vary among populations but there is no data regarding its distribution from India. The present study was carried out to determine the Codon 447 polymorphism of CTR gene in 105 normal unrelated individuals from North India. We obtained an allelic frequency of 0.60 and 0.40 for C and T allele and percentage of genotypes CC, CT and TT as 24.8%, 69.5.and 5.7% respectively. Our results suggest that the frequency and distribution of this polymorphism in India is substantially different from other populations and ethnic groups.