

Physical distribution of LINE-1 in *Acomys* sp. (Rodentia, Muridae), *Microtus* sp. (Rodentia, Cricetidae) and *Cricetomys* sp. (Rodentia, Nesomyidae)

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“Long Interspersed Nuclear Elements” (LINEs) are an ancient family of retroelements found across a wide phylogenetic range, LINE-1 being the most recent lineage. LINE-1 are thought to have been present in the ancestral genome prior to the mammalian radiation, and nowadays represent an important component of mammalian genomes, suggesting that they provide an advantage to the genomes they inhabit.

Different authors suggested that LINE-1 are not transposed randomly and the target sites might be conserved among mammalian species. In order to study genomic organization on rodents *Acomys* sp. (Rodentia, Muridae), *Microtus* sp. (Rodentia, Cricetidae) and *Cricetomys* sp. (Rodentia, Nesomyidae), we analysed the chromosome distribution of LINE-1 by isolating these elements from these genomes and performing its physical mapping. The same chromosome preparations were then submitted to classical C-banding. In two of the three genomes there was detected a preferential accumulation of LINE-1 on certain chromosomes and, in all the species, the sequential C-banding showed that LINE-1 are preferentially located in euchromatin.

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