NEW MICROSATELLITES ASSIGNMENT USING A HAMSTER-SHEEP CELL HYBRID PANEL

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A panel of 24 hamster-sheep somatic cell hybrids had been previously obtained by Saïdi-Mehtar et al., 1981 and it was investigated for sheep gene mapping. Characterization of this panel was performed using PCR method with 229 markers (genes or microsatellites) selected from sheep, cattle and goat maps. 146 chromosomal fragments of different lengths were defined.

In the present study, 21 additional microsatellites were analyzed by PCR in this hybrid panel. Synteny was identified according statistical rules from Chevalet and Corpet, 1986.

The results allowed new localization of these microsatellites on 10 different sheep chromosomes : OAR2, 3, 5, 6,10, 11, 21, 24, 26 and X.

This study contribuated to hybrid panel characterization by detecting new breakpoints on the following ovine chromosomes : OAR2, 5, 11, 21, 24 and X, defining new chromosomal fragments. Thus, the total number of chromosomes fragments was increased to 152.