

**DETECTION OF MIROVARIANTS AND LARGE ALLELES IN MICROSATELLITE
SYSTEMS SE33/ACTBP 2, FGA/FIBRA AND S21S11**

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Medigenomix is specialized in DNA analytical services for DNA sequencing and genotyping. Our genotyping service includes identity testing in humans and animals, population genetics, gene-mapping, pharmacogenetics and forensic DNA analysis. We are involved in high throughput genotyping for the German forensic databank and in private casework since 1998. Thus we have analysed many thousands of samples using the SGM set of microsatellites completed with the system SE33/ACTBP2, which is included in the German database set. With this long term experience we found microvariants and rare large alleles in the microsatellite systems SE33/ACTBP2, FGA/FIBRA and D21S11, which are presented on our poster.

To verify the structure of these rare alleles we have cloned and sequenced those with more than 40 repeats in the systems SE33/ACTBP2 and FGA/FIBRA as well as the microvariants in the system D21S11. Sequences and order of repeats will be shown. Furthermore we describe a paternity case where a large FGA allele was the common allele in father and son.