

## F11 POSTER

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### IDENTIFICATION OF A SINGLE NUCLEOTIDE POLYMORPHISM IN THE JY-1 GENE IN NELLORE CATTLE.

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The JY-1 protein was firstly described in cattle and is an oocyte specific protein that plays a key role in the regulation of the granulose cells functions. It also influences the early embryo development. The aim of this study was to analyze a region of the exon 3 of the JY-1 gene in Nellore cattle in order to investigate possible polymorphisms. DNA was extracted from tail hair of 150 Nellore heifers by the Phenol-Chloroform-Isoamyl Alcohol protocol. The primers 5'ATCAAACCTGAACAGGGCAGA3' and 5'AAGTATGACAAGAGATACGGTCAGG3' were designed to amplify a partial region of exon 3. The fragment amplified by the PCR has 373 bp. After, the SSCP technique was done. It was possible to identify two patterns of migration, one of them has two bands and the other has three bands. One sample of each pattern of migration was sequenced and a SNP was identified at the position 165 of the fragment. The polymorphism is characterized by a substitution of a cytosine (C) by a thymine (T). The pattern with two bands is a homozygote TT and the pattern with three bands is the heterozygote TC. The homozygote CC wasn't observed. The sequences were deposited in Genbank under the accession numbers: JF262042 and JF262043. Future studies of genotyping more samples must be done in order to verify the allelic and genotypic frequencies and also the possible influence of the SNP in reproductive traits.

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