# CLONING OF SPERMADHESIN GENES FROM GOAT SEMINAL VESICLE

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Spermadhesins belong to a family of secretory proteins of the male genital tract that constitute the major proteins of the seminal plasma. Spermadhesins form a group of 12 to 16 kDa polypeptides with a single CUB-domain that has been involved in different steps of fertilization. In previous work, spermadhesin from buck seminal plasma (BSFP) with a molecular weight of 12.5 kDa was isolated and partially characterized by mass spectrometry and N-terminal sequencing. In the present study, we aimed to found the gene that encodes that protein. To achieve this objective, we prepared the cDNAs of seminal vesicle from a sexually mature buck. To amplify the cDNA 3'-end we used a primer designed based on distinct conserved region of BSFP. We produced several amplicons of ~700 bp. Cloning and sequencing of these PCR products allow us to identify three new cDNAs encoding buck spermadhesins named bodhesin-1, -2 and -3. All three deduced amino acid sequences are highly similar (50%) to boar AWN spermadhesin and the bodhesin-2 sequence is identical to the BSFP N-terminal. Probably this putative isoform is the previously isolated BSFP protein. These results indicate that bodhesins seem to belong to a multigene family encoding proteins with conserved CUB domain essential for their biological function.

**Supported by:** FUNCAP and CNPq
**Key words:** Spermadhesin, gene, goat