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## Partial cloning of subolesin gene from the camel tick *Hyalomma dromedarii*

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Infestation of camels by ticks results in severe economical losses. Identification of proteins from tick salivary glands will enhance our understanding of the physiology of parasitism and will aid in the development of anti-tick vaccines. In this study, we report partial identification of the subolesin gene from salivary glands of *H. dromedarii* ticks through immunoscreening of the corresponding cDNA expression library. The obtained sequence has an open reading frame of 440 bp encoding a polypeptide of 146 amino acids of calculated molecular weight 17.196 kDas and calculated isoelectric point of 9.52. The amino acid sequence revealed 24 basic (+) (K, R), 17 acidic (-) amino acids (D, E) in addition to 36 hydrophobic amino acids (A, I, L, F, W, V) and 42 polar amino ones (N, C, Q, S, T, Y). Our sequence lacks around 33 bp from the 5' end sequence including the ATG and around 12 bases from the 3' end including the stop codon. The amino acid sequence showed a high degree of similarity to many previously identified protective subolesin (4D8) gene from the tick *H. marginatum* (93%), the brown dog tick *Rhipicephalus sanguineus* (85%) and the cattle tick *Rhipicephalus microplus* (86%). The obtained sequence was expressed in *E. coli* purified under denaturing conditions and tested for its immunological protections and effects on feeding and reproductive performance of adult females.

### Biography

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