

A scientific note on a cDNA fragment of vitellogenin gene from *Bombus hypocrita*

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Abstract Vitellogenin is generally considered as a female-specific protein, which is generally synthesized by the fat body. The cDNA fragment of *Bombus hypocrita* vitellogenin was cloned and sequenced in this paper. BLAST analysis of the cDNA fragment, 3110 nucleotides long, showed 92% homology at the nucleotide level with *Bombus ignitus* vitellogenin cDNA (GenBank accession number: FJ606797). The alignment with 19 insect vitellogenins shows a high number of conserved motifs; for example, close to the C-terminus there is a GL/ICG motif followed by nine cysteines, as occurs in all hymenopteran species, and, as in other insect vitellogenins, a DGXR motif is located 18 residues upstream the GL/ICG motif. Phylogenetic analysis of vitellogenin sequences available in insects gave a tree that is congruent with the currently accepted insect phylogenetic schemes. Further research on the structural analysis of a complete cDNA and expression studies should be conducted. Special attention should be directed to assess the developmental and sex specialty of vitellogenin expression or other biological events in *Bombus hypocrita*.