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(54) **METHOD FOR PRODUCING WEB PROTEIN, A FUSED PROTEIN, RECOMBINANT DNA, AN EXPRESSION VECTOR, A HOST CELL AND STRAIN-PRODUCERS**

(57) The invention relates to the field of biotechnology and provides a method for producing recombinant proteins from the orb-weaving spider silk in yeast cells. This involves the construction of an expression vector which comprises a DNA sequence encoding a recombinant protein of the orb-weaving spider silk fused with a sequence encoding an ubiquitin-like protein occupying an N-terminal position with respect to the spider silk recombinant protein within the fused protein. The expression of a hybrid gene makes it possible to increase tens

of times the production of recombinant spider silk protein, wherein the recombinant protein accumulates in the yeast cells in a water-insoluble fraction in the form of a processed protein free of a hybrid component.

The invention also relates to fused proteins comprising sequences of recombinant proteins of the orb-weaving spider silk and of ubiquitin-like proteins, to recombinant DNAs encoding the fused proteins, to host yeast cells and to expression vectors suitable for carrying out the method, and also to producer strains of recombinant proteins of the orb-weaving spider silk.

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