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ABSTRACT

Expression of *Carcinoscorpius rotundicauda* factor C in eukaryotes

The expression of *Carcinoscorpius rotundicauda* Factor C in eukaryotes is disclosed. Various CrFC cDNA constructs were transformed into *P. pastoris* (Fig. 4) and *S. cerevisiae* (Fig. 9) and expressed to yield full-length recombinant Factor C (rCrFC) protein of ~135 kDa which is immunoreactive. CrFC21 cDNA was also cloned into two mammalian vectors: pCIneo and pCDNAI for expression in mammalian cell lines. The rCrFC is expressed in an intracellular, insoluble form thus providing protection from premature digestion by proteases secreted by the host cell. Using established protocols, the protein can be denatured and renatured to recover its biological functionality. The rCrFC produced from both CrFC21 and truncated CrFC26 constructs expressed by 2 yeasts: *P. pastoris* and *S. cerevisiae* are solubilized by Triton X-100 SDS or sarkosyl, and is found to be immunoreactive.

(Fig. 7 is to be published)