

Claims

1. (Currently amended) A nucleic acid comprising a sequence having at least 95% identity with SEQ ID NO: 1, excluding SEQ ID NO: 3 wherein the nucleic acid sequence encodes for a protein comprising SEQ ID NO: 6 or a conservative variant thereof when expressed in an enterobacterial host cell.
2. (Currently amended) An expression vector ~~for production of a protein comprising SEQ ID NO: 6, the expression vector comprising a~~ the nucleic acid sequence comprising at least 95% identity with SEQ ID NO: 1, excluding SEQ ID NO: 3 of claim 1.
3. (Currently amended) ~~The expression vector of claim 2~~ The nucleic acid of claim 1, wherein the nucleic acid sequence is incorporated into an expression vector to comprise further comprising a nucleic acid sequence having at least 95% identity with SEQ ID NO: 2, excluding SEQ ID NO: 4.
4. (Currently amended) A composition comprising the protein comprising SEQ ID NO: 6 or a conservative variant thereof, the protein prepared using the expression vector by expression of the nucleic acid sequence of claim 2 1 in an enterobacterial host cell, wherein the composition is free of a protein represented by SEQ ID NO: 6-Y136C.
5. (Currently amended) A method for preparing a protein comprising SEQ ID NO: 6 or a conservative variant thereof, the method comprising:
transforming introducing into an enterobacterial host cell an expression vector
comprising a nucleic acid comprising a sequence comprising at least 95% identity with SEQ ID NO: 1, excluding SEQ ID NO: 3;
culturing the enterobacterial host cell under conditions effective to produce the protein;
and

- obtaining the protein from the enterobacterial host cell.
6. (Currently amended) The method of claim 5, wherein the nucleic acid sequence is incorporated into an expression vector ~~further comprises~~ to comprise a nucleic acid sequence having at least 95% identity with SEQ ID NO: 2, ~~excluding SEQ ID NO: 4.~~
7. (Original) The method of claim 5, wherein the enterobacteria comprises *Escherichia Coli*.
- 8-15. (Cancelled)
16. (New) The method of claim 5, wherein the method further comprises an acid precipitation step to purify the protein.
17. (New) An enterobacterial host cell expressing the nucleic acid sequence of claim 1.
18. (New) A modified enterobacterial host cell, the modified enterobacterial host cell expressing a heterologous nucleic acid comprising a sequence having at least 95% identity with SEQ ID NO: 1.
19. (New) The modified enterobacterial host cell of claim 18, wherein the nucleic acid sequence encodes for a protein comprising SEQ ID NO: 6 or a conservative variant thereof when expressed in an enterobacterial host cell.
20. (New) The modified enterobacterial host cell of claim 18, wherein the enterobacteria comprises *Escherichia Coli*.