CLAIMS

1- An eukaryotic expression vector comprising a nucleotide sequence encoding for the human long pentraxin PTX3 protein under the control of an effective promoter and a nucleotide sequence encoding for a selectable marker, having essentially the sequence of SEQ ID 1.

2- Use of the vector according to claim 1 for transforming a host cell.

3- The use of the vector according to claim 2 wherein the host cell is a recombinant human cell already able to express the human long pentraxin PTX3 protein.

4- The use of the vector according to claim 3 wherein the recombinant human cell is the recombinant 293F/PTX3/2F12 clone deposited at ECACC with no. 08011001.

5- The use of the vector according to any of previous claims wherein the vector is linearized.

6- A recombinant cell able to express the human long pentraxin PTX3 protein encoded by the vector according to any of previous claim 1.

7- The recombinant cell according to claim 6 being a recombinant HEK293F cell line.

8- The recombinant cell according to claim 7 being the recombinant MS24PTX clone .

9- Use of the recombinant cell according to any one of claims 6-8 for the production of human long pentraxin PTX3 protein.

10- A process for the production of the human long pentraxin PTX3 protein comprising:

d) transfecting a recombinant human cell already expressing recombinant human long pentraxin PTX3 protein, with a plasmid in which the human long pentraxin gene is under the control of the CMV promoter;
e) selecting and growing transfected recombinant human cell;
f) purifying the human long pentraxin PTX3 protein from the culture medium of the transfected recombinant human cell.

11- The process according to claim 10 wherein the recombinant human cell expressing a recombinant human long pentraxin PTX3 protein is a recombinant HEK293F cell line.

12- The process according to claim 11 wherein the recombinant HEK293F cell line expressing a recombinant human long pentraxin PTX3 is the recombinant 293F/PTX3/2F12 clone deposited at ECACC under number 08011001.

13- The process according to claim 12 wherein the transfected recombinant human cell is MS24PTX clone.

14- The process of claims 10 to 13 wherein the purification step includes at least one of the following step: anionic-exchange chromatography, hydroxyapatite chromatography or size exclusion chromatography.

15- A process for the production of the recombinant human long pentraxin PTX3 protein comprising:

a) co-transfecting contemporarily or sequentially human cells with a first vector having essentially the sequence of SEQ ID 1 and a second vector having essentially the sequence of SEQ ID 2;

b) selecting and growing the double transfected cells;

b) purifying the human long pentraxin PTX3 protein from the culture medium of double transfected cells.

16- A process for the production the recombinant human long pentraxin PTX3 protein comprising the step of growing the recombinant MS24PTX clone and purifying the human long pentraxin PTX3 protein from the culture medium.

CLAIMS

1. Use of an eukaryotic expression vector comprising a nucleotide sequence encoding for the human long pentraxin PTX3 protein under the control of an effective promoter and a nucleotide sequence encoding for a selectable marker, having essentially the sequence of SEQ ID 1 for transforming a recombinant human host cell already able to express the human long pentraxin PTX3 protein, wherein said recombinant human host cell is the recombinant 293F/PTX3/2F12 clone deposited at ECACC with no. 08011001.

2. The use of the vector according claim 1 wherein the vector is linearized.

3. A transformed recombinant human cell able to express the human long pentraxin PTX3 protein being the recombinant 293F/PTX3/2F12 clone deposited at ECACC with no. 08011001 further transformed by using the vector according to claim 1.

4. The transformed recombinant human cell according to claim 3, being the recombinant MS24PTX clone deposited at Health Protection Agency, Culture Collections Centre For Emergency Preparedness and Response Salisbury UK, with no. 09072902.

5. Use of the transformed recombinant human cell according to claim 3 or 4 for the production of human long pentraxin PTX3 protein.

6. A process for the production of the human long pentraxin PTX3 protein comprising:

a) transfecting a recombinant human cell already expressing recombinant human long pentraxin PTX3 protein, with a plasmid in which the human long pentraxin gene is under the control of the CMV promoter;
b) selecting and growing the transfected recombinant human cell;
c) purifying the human long pentraxin PTX3 protein from the culture medium of the transfected recombinant human cell

wherein the recombinant human cell already expressing recombinant human long pentraxin PTX3 protein is the recombinant 293F/PTX3/2F12 clone deposited at ECACC with no. 08011001.

7. The process according to claim 6, wherein the transfected recombinant human cell is the MS24PTX clone deposited at Health Protection Agency, Culture Collections Centre For Emergency Preparedness and Response Salisbury UK, with no. 09072902.

8. The process of claim 6 or 7 wherein the purification step includes at least one of the following step: anionic-exchange chromatography, hydroxyapatite chromatography or size exclusion chromatography.