CLAIMS

What is claimed is:

1. A host cell comprising a donor plasmid and a helper plasmid,

(a) wherein the helper plasmid comprises: (i) under control of a first promoter, an open reading frame encoding lambda red recombinase; and (ii) under control of a second promoter, an open reading frame encoding a restriction endonuclease that has a recognition sequence that is not present in the host cell genome; and

(b) wherein the donor plasmid comprises: (i) from 5' to 3': (1) the recognition sequence of the restriction endonuclease; (2) a first homology region of at least 0.5 kilobases (kb), (3) a heterologous insert DNA of at least 8 kb; and (4) a second homology region of at least 0.5 kb; and (ii) a counterselection marker.

2. The host cell of claim 1, wherein the heterologous insert DNA is at least 20 kb.

3. The host cell of any one of claims 1-2, further comprising an oligosaccharyl transferase.

4. The host cell of any one of claims 1-3, further comprising at least one glycosyltransferase.

5. The host cell of any one of claims 1-4, wherein one or more genes native to the host cell have been deleted or inactivated.

6. The host cell of any one of claims 1-5, wherein said heterologous insert DNA comprises an *rfb* cluster of a prokaryotic organism.

7. The host cell of any one of claims 1-6, wherein said host cell further comprises a nucleic acid encoding a carrier protein comprising a consensus sequence for N-glycosylation.

8. A method for inserting a large sequence of DNA into a genome of a host cell comprising the use of a donor plasmid and a helper plasmid, comprising the steps of A) introducing the donor plasmid and the helper plasmid into the same host cell and B) initiating the insertion procedure;

(a) wherein the helper plasmid comprises: (i) under control of a first promoter, an open reading frame encoding lambda red recombinase; and (ii) under control of a second promoter, an open reading frame encoding a restriction endonuclease that has a recognition sequence that is not present in the host cell genome; and

(b) wherein the donor plasmid comprises: (i) from 5' to 3': (1) the recognition sequence of the restriction endonuclease; (2) a first homology region of at least 0.5 kilobases (kb), (3) a heterologous insert DNA of at least 8 kb; and (4) a second homology region of at least 0.5 kb; and (ii) a counterselection marker.

9. A host cell produced by the method of claim 8 wherein said host cell comprises one or more genes that encode a protein of interest.

10. A method of producing a glycoconjugate comprising a carrier protein and an antigen, wherein said method comprises culturing the host cell of claim 7 or 9 under conditions suitable for the production of proteins.

11. An isolated host cell, wherein a heterologous gene that encodes an oligosaccharyl transferase has been inserted into the genome of the host cell.

12. The isolated host cell of claim 11, wherein said host cell is *E. coli*.

13. The isolated host cell of claim 11 or 12, wherein said gene is the *C. jejuni pglB* gene.

14. The isolated host cell of any one of claims 11-13, wherein the copy number of the heterologous gene in the host cell is 1, 2, 3, 4, or 5.

15. The isolated host cell of any one of claims 11-14, wherein said host cell comprises a carrier protein comprising a consensus sequence Asn-X-Ser(Thr), wherein X can be any amino acid except Pro.

16. A method of producing an N-glycosylated protein, wherein said method comprises culturing the host cell of any one of claims 11-15 under conditions suitable for the production of proteins.