CLAIMS

1. A method of producing a composition comprising a bioconjugate, wherein said bioconjugate comprises a carrier protein linked to an O antigen, said method comprising:

(i) expressing in bacteria (procaryotic host cell): modified Exotoxin of *Pseudomonas Aeruginosa* (EPA) protein containing at least one consensus sequence, D/E – X – N – Z – S/T, wherein X and Z may be any natural amino acid except proline, or the AcrA protein; an oligosaccharyl transferase (OTase); and one or more O antigens;

(ii) growing the bacteria for a period of time to produce an amount of the biconjugate comprising the AcrA protein or the modified EPA protein linked to the one or more O antigens;

(iii) extracting periplasmic proteins from the procaryotic host cell; and

(iv) separating the bioconjugate from the extracted periplasmic proteins by anionic exchange and size exclusion chromatography;

wherein the periplasmic proteins further comprise at least one polypeptide sequence which target said periplasmic proteins to an outer membrane of the procaryotic host cell;

wherein the procaryotic host cell comprises a functional pgl operon from *Campylobacter ssp*, preferably *C. jejuni* which makes production of proteins more efficient;

wherein said functional pgl operon is a cluster of nucleic acids which encodes said OTase; and

wherein said O antigen is from extraintestinal pathogenic *E. coli* (ExPEC), *S. flexneri* 2a, *S. flexneri* 3a, *S. flexneri* 3b, *S. flexneri* 6 or *S. sonnei*.

2. The method of claim 1, wherein said oligosaccharyl transferase is from *Campylobacter*.

3. The method of claim 2, wherein said oligosaccharyl transferase is from *Campylobacter jejuni*.

4. The method of claim 1, wherein said composition is at least 98% pure with respect to the bioconjugate.

5. The method of claim 3, wherein said composition is at least 98% pure with respect to the bioconjugate.