CLAIMS:

1. A fusion polypeptide comprising a first and a second domain, wherein the first domain comprises a polypeptide ligand which binds to a cell surface-associated antigen and the second domain comprises aglycosylated interferon α 2b (IFNα2b) having a sequence of SEQ ID NO: 1 or SEQ ID NO: 2 and wherein the aglycosylated IFNα2b further comprises one or more amino acid substitutions or deletions which attenuate the activity of the aglycosylated IFNα2b.

2. The fusion polypeptide as claimed in claim 1 in which the sequence of the aglycosylated IFNα2b is SEQ ID NO: 1 in which the residue at position 106 is selected from the group consisting of A, C, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, V, W and Y.

3. The fusion polypeptide as claimed in claim 1 or 2 in which the sequence of the aglycosylated IFNα2b is SEQ ID NO: 1 in which the residue at position 106 is A.

4. The fusion polypeptide as claimed in any one of claim 1 to 3 in which the sequence of the aglycosylated IFNα2b is SEQ ID NO: 1 modified by the attenuating mutation(s) selected from the group consisting of L15A, R22A, R23A, S25A, L26A, F27A, L30A, L30V, K31A, D32A, R33A, R33K, R33Q, H34A, Q40A, D114R, L117A, R120A, R120E, R125A, R125E, K131A, E132A, K133A, K134A, M148A, R149A, S152A, L153A, N156A, (L30A, H57Y, E58N and Q61S), (M148A, H57Y, E58N and Q61S), (L153A, H57Y, E58N and Q61S), (R144A, H57Y, E58N and Q61S), (N65A, L80A, Y85A and Y89A,) (N65A, L80A, Y85A, Y89A and D114A), (N65A, L80A, Y85A, Y89A and L117A), (N65A, L80A, Y85A, Y89A and R120A), (Y85A, Y89A and D114A), (D114A and R120A), (L117A and R120A), (L117A, R120A and K121A), (R120A and K121A), (R120E and K121E), replacement of R at position 144 with A, D, E, G, H, I, K, L, N, Q, S, T, V or Y, replacement of A at position 145 with D, E, G, H, I, K, L, M, N, Q, S, T, V or Y, and deletion of residues L161 to E165.

5. The fusion polypeptide as claimed in any one of claims 1 to 3 in which the sequence of the aglycosylated IFNα2b is SEQ ID NO: 2 modified by the

attenuating mutation(s) selected from the group consisting of L15A, R22A, R23A, S25A, L26A, F27A, L30A, L30V, K31A, D32A, R33A, R33K, R33Q, H34A, Q40A, D113R, L116A, R119A, R119E, R124A, R124E, K130A, E131A, K132A, K133A, M147A, R148A, S149A, L152A, N155A, (L30A, H57Y, E58N and Q61S), (M147A, H57Y, E58N and Q61S), (L152A, H57Y, E58N and Q61S), (R143A, H57Y, E58N and Q61S), (N65A, L80A, Y85A and Y89A,) (N65A, L80A, Y85A, Y89A and D113A), (N65A, L80A, Y85A, Y89A and L116A), (N65A, L80A, Y85A, Y89A and R1190A), (Y85A, Y89A and D113A), (D113A and R119A), (L116A and R119A), (L116A, R119A and K120A), (R119A and K120A), (R119E and K120E), replacement of R at position 143 with A, D, E, G, H, I, K, L, N, Q, S, T, V or Y, replacement of A at position 144 with D, E, G, H, I, K, L, M, N, Q, S, T, V or Y, and deletion of residues L160 to E164.

6. The fusion polypeptide as claimed in any one of claims 1 to 5 in which the sequence of the aglycosylated IFNα2b is selected from the group consisting of SEQ ID NOs: 3 to 30 and SEQ ID NOs: 32 to 47.

7. The fusion polypeptide as claimed in any one of claims 1 to 6 in which the cell surface-associated antigen is selected from the group consisting of CD38, CD138, RANK-Ligand, HM1.24, CD56, CS1, CD20, CD74, IL-6R, Blys (BAFF), BCMA, HLA-SR, HLA-DR, Kininogen, beta2 microglobulin, FGFR3, ICAM-1, matriptase, CD52, EGFR, GM2, alpha4-integrin, IFG-1R, KIR, CD3, CD4, CD8, CD24, CD44, CD69, CD71, CD79, CD83, CD86, CD96, HLA, PD-1, ICOS, CD33, CD115, CD11c, CD19, CD52, CD14, FSP1, FAP, PDGFR alpha, PDGFR beta, ASGR1, ASGR2, FSP1, RTI140/Ti-alpha, HTI56, VEGF receptor, CD241 the product of the RCHE gene, CD117 (c-kit), CD71 (transferrin receptor), CD36 (thrombospondin receptor), CD34, CD45RO, CD45RA, CD115, CD168, CD235, CD236, CD237, CD238, CD239 and CD240.

8. The fusion polypeptide as claimed in any one of claims 1 to 7 in which the polypeptide ligand is an antibody or antigen binding portion thereof.

9. The fusion polypeptide as claimed in any one of claims 1 to 8 in which the polypeptide ligand is an antibody which binds CD38.

10. The fusion polypeptide as claimed in claim 9 in which the V_H sequence of the antibody is selected from the group consisting of SEQ ID Nos: 48 to 56 and 58.

11. The fusion polypeptide as claimed in claim 9 or claim 10 in which the V_L sequence of the antibody is selected from the group consisting of SEQ ID Nos: 81, 82 and 84.

12. The fusion polypeptide as claimed in any one of claims 1 to 11 in which the first domain is linked to the second domain via a peptide bond.

13. The fusion polypeptide as claimed in any one of claims 1 to 11 in which the first domain is linked to the second domain directly via a peptide bond.

14. The fusion polypeptide as claimed in any one of claims 1 to 11 in which the C-terminus of the first domain is linked to N-terminus of the second domain.

15. A fusion polypeptide comprising a sequence selected from the group consisting of SEQ ID NOs: 31, 61 to 77, 83 and 87, and a sequence selected from the group consisting of SEQ ID NOs: 81, 82 and 84.

16. A fusion polypeptide comprising SEQ ID NO: 87 and SEQ ID NO: 81.

17. A composition comprising the fusion polypeptide as claimed in any one of claims 1 to 16 and a pharmaceutically acceptable carrier or diluent.

18. An isolated polynucleotide(s) encoding the fusion polypeptide(s) as claimed in any one of claims 1 to 16.

19. A vector comprising one or more of the polynucleotide(s) of claim 18.

20. A transformed cell comprising the vector of claim 19.

21. A method of generating a polypeptide ligand-attenuated IFNα2b fusion polypeptide in mammalian cells, wherein the polypeptide ligand-attenuated

IFNα2b fusion polypeptide has reduced heterogeneity and/or enhanced FcRn binding and/or enhanced target selectivity, the method comprising culturing a recombinant mammalian cell comprising one or more polynucleotides encoding the polypeptide ligand-attenuated IFNα2b fusion polypeptide wherein T106 of the IFNα2b sequence is replaced with another amino acid or is deleted such that on expression the IFNα2b component of the fusion protein is aglycosylated.