CLAIMS

1. An Fc construct comprising:

a). a first polypeptide having the formula A-L-B; wherein

i). A comprises a first Fc domain monomer;

ii). L is a linker; and

iii). B comprises a second Fc domain monomer;

b). a second polypeptide having the formula A'-L'-B'; wherein

i). A' comprises a third Fc domain monomer;

ii). L' is a linker; and

iii). B' comprises a fourth Fc domain monomer;

c). a third polypeptide that comprises a fifth Fc domain monomer; and

d). a fourth polypeptide that comprises a sixth Fc domain monomer;

wherein A of first polypeptide and A' of second polypeptide combine to form a first Fc domain, B of first polypeptide and fifth Fc domain monomer combine to form a second Fc domain, and B' of second polypeptide and sixth Fc domain monomer combine to form a third Fc domain; and
wherein the first and second polypeptide comprise the sequence of SEQ ID NO: 49, and the third and fourth polypeptide comprise the sequence of SEQ ID NO: 48.

2. A pharmaceutical composition comprising the Fc construct of claim 7.

3. Use of the Fc construct of claim 7 in the manufacture of a medicament for the treatment of an autoimmune disease.

4. Use of the Fc construct claim 7 in the manufacture of a medicament for the treatment of inflammation.

5. A cell culture medium comprising a homogenous population of an Fc construct comprising:

a) a first polypeptide having the formula A-L-B; wherein

i) A comprises a first Fc domain monomer;

ii) L is a glycine spacer; and

iii) B comprises a second Fc domain monomer;

b) a second polypeptide having the formula A'-L'-B'; wherein

i) A' comprises a third Fc domain monomer;

ii) L' is a glycine spacer; and

iii) B' comprises a fourth Fc domain monomer;

c) a third polypeptide that comprises a fifth Fc domain monomer; and

d) a fourth polypeptide that comprises a sixth Fc domain monomer;

wherein the first and second polypeptide comprise the sequence of SEQ ID NO: 49, and the third and fourth polypeptide comprise the sequence of SEQ ID NO: 48.

6. The cell culture medium of claim 5, wherein the homogenous population of the Fc construct is at least 85% homogenous.

7. A method of preparing a cell culture medium comprising a homogenous population of an Fc construct of claim 7, the method comprising:

a) providing host cells in a cell culture medium, wherein the cells comprise polynucleotides encoding each of the first, second, third, and fourth polypeptides of claim 1;

b) expressing the polypeptides in the host cells under conditions that allow for the formation of the Fc construct and secretion into the cell culture medium; and

c) collecting the cell culture medium.

8. The method of claim 7, wherein the homogenous population of the Fc construct is at least 85% homogenous.