The invention claimed is:

1. A sustained release formulation comprising;

(i) a gel core comprising a self-assembling first peptide and a therapeutic antibody, wherein the self-assembling first peptide has an amino acid sequence selected from the group consisting of Ac-$(RADA)_2$-$CONH_2$ (SEQ ID NO: 1), Ac-$(RADA)_3$-$CONH_2$ (SEQ ID NO: 2), Ac-$(RADA)_4$-$CONH_2$ (SEQ ID NO: 3), and Ac-$(RADA)_5$-$CONH_2$ (SEQ ID NO: 4); and,

(ii) a first layer encapsulating said gel core, wherein said first layer comprises a self-assembling second peptide, wherein the self-assembling second peptide has an amino acid sequence selected from the group consisting of Ac-$(KLDL)_3$-$CONH_2$ (SEQ ID NO: 7), Ac-$(KLDL)_4$-$CONH_2$ (SEQ ID NO: 8) and Ac-$(KLDL)_5$-$CONH_2$ (SEQ ID NO: 9).

2. The formulation of claim **1**, wherein said formulation provides sustained release of said antibody for at least about four weeks, five weeks, six weeks, seven weeks, eight weeks, nine weeks, ten weeks, eleven weeks, twelve weeks or more.

3. The formulation according to claim **1**, further comprising one or more layers of gel encapsulating said first layer.

4. The formulation according to claim **1**, wherein said self-assembling first peptide has the amino acid sequence of Ac-$(RADA)_4$-$CONH_2$ (SEQ ID NO: 3).

5. The formulation according to claim **1**, wherein said self-assembling second peptide has the amino acid sequence of Ac-$(KLDL)_3$-$CONH_2$ (SEQ ID NO: 7).

6. The formulation according to claim **1**, wherein said therapeutic agent is present in the plasma of said subject upon administration for at least four weeks, five weeks, six

weeks, seven weeks, eight weeks, nine weeks, ten weeks, eleven weeks, twelve weeks or more.

7. The formulation according to claim **1**, wherein the therapeutic agent is IgD, IgA, IgM, IgE, or IgG immunoglobulin.

8. The formulation according to claim **1**, wherein said therapeutic agent is an antibody selected from the group consisting of: IgG1, IgG2, IgG3 and IgG4, IgM1 and IgM2, and IgA1 and IgA2 antibodies.

9. The formulation according to claim **1**, wherein said therapeutic agent is a whole antibody or single-chain Fv antibody fragment or Fab antibody fragment.

10. The formulation according to claim **1**, wherein said therapeutic agent is selected from Rituximab, Infliximab, Trastuzumab, Abciximab, Palivizumab, Murumonab-CD3, Gemtuzumab, Trastuzumab, Basiliximab, Daclizumab, Etanercept, and Ibritumomab tiuxetan.

11. The formulation according to claim **1**, wherein said therapeutic agent is selected from the group consisting of anti-TNF antibodies, anti-CD3 antibodies, anti-CD20 antibodies, anti-CD25 antibodies, anti-CD33 antibodies, anti-CD40 antibodies anti-HER2 antibodies, anti-HBV antibodies, anti-HAV antibodies, anti-HCV antibodies, anti-GPIIb/IIIa receptor antibodies, anti-RSV antibodies, anti-HIV antibodies, anti-HSV antibodies and anti-EBV antibodies.

12. A method of controlled delivery of a therapeutic agent comprising the step of administering a formulation according to claim **1** to a subject in need thereof.

13. The method according to claim **12**, wherein said subject is human.

14. The method according to claim **12**, wherein said therapeutic agent is IgG.

15. A process for preparing a controlled release formulation comprising the steps of;

a. preparing a first solution comprising a self-assembling first peptide, and an antibody or antibody fragment, wherein the self-assembling first peptide has an amino acid sequence selected from the group consisting of Ac-$(RADA)_2$-$CONH_2$ (SEQ ID NO: 1), Ac-$(RADA)_3$-$CONH_2$ (SEQ ID NO: 2), Ac-$(RADA)_4$-$CONH_2$ (SEQ ID NO: 3), and Ac-$(RADA)_5$-$CONH_2$ (SEQ ID NO: 4);
b. forming a gel core;
c. coating said gel core with a self-assembling second peptide solution, wherein the self-assembling second peptide has an amino acid sequence selected from the group consisting of Ac-$(KLDL)_3$-$CONH_2$ (SEQ ID NO: 7), Ac-$(KLDL)_4$-$CONH_2$ (SEQ ID NO: 8) and Ac-$(KLDL)_5$-$CONH_2$ (SEQ ID NO: 9); and,
d. forming a layer encapsulating said first self-assembled gel core.

16. The process according to claim **15**, wherein said controlled release formulation further comprises the step of forming one or more layers of coating comprising self-assembling peptides.

17. The process according to claim **15**, wherein said self-assembling first peptide is Ac-$(RADA)_4$-$CONH_2$ (SEQ ID NO: 3).

18. The process according to claim **15**, wherein said self-assembling second peptide is Ac-$(KLDL)_3$-$CONH_2$ (SEQ ID NO: 7).

19. The process according to claim **16**, wherein said one or more layers comprises a self-assembling peptide selected from Ac-$(KLDL)_3$-$CONH_2$(SEQ ID NO: 7), Ac-$(KLDL)_4$-$CONH_2$ (SEQ ID NO: 8) and Ac-$(KLDL)_5$-$CONH_2$ (SEQ ID NO: 9).

20. The process according to claim **15**, wherein the antibody is an IgD, IgA, IgM, IgE, or IgG immunoglobulin.

21. The process according claim **20**, wherein said antibody is selected from the group consisting of: IgG1, IgG2, IgG3 and IgG4, IgM1 and IgM2, and IgA1 and IgA2 antibodies.

22. A process for preparing a controlled release formulation comprising the steps of:

a. preparing a first solution comprising a self-assembling first peptide, and a therapeutic agent, wherein the self-assembling first peptide has an amino acid sequence selected from the group consisting of Ac-$(RADA)_2$-$CONH_2$ (SEQ ID NO: 1), Ac-$(RADA)_3$-$CONH_2$ (SEQ ID NO: 2), Ac-$(RADA)_4$-$CONH_2$ (SEQ ID NO: 3), and Ac-$(RADA)_5$-$CONH_2$ (SEQ ID NO: 4);

b. forming a self-assembled gel core;

c. coating said gel core with a self-assembling second peptide, wherein the second peptide has an amino acid sequence selected from the group consisting of Ac-$(KLDL)_3$-$CONH_2$ (SEQ ID NO: 7), Ac-$(KLDL)_4$-$CONH_2$ (SEQ ID NO: 8) and Ac-$(KLDL)_5$-$CONH_2$ (SEQ ID NO: 9); and,

d. forming a layer encapsulating said gel core.

23. The process according to claim **22**, wherein said controlled release formulation further comprises the step of forming one more layers of coating comprising self-assembling peptides.

24. The process according to claim **22**, wherein said self-assembling first peptide is Ac-$(RADA)_4$-$CONH_2$ (SEQ ID NO: 3).

25. The process according to claim **22**, wherein said second peptide is Ac-$(KLDL)_3$-$CONH_2$ (SEQ ID NO: 7).

26. The process according to claim **22**, wherein said therapeutic agent is a protein.

27. The process according to claim **22**, wherein said therapeutic agent is selected from erythropoietin (EPO), interferon-alpha, interferon-beta, interferon-gamma, growth hormone, growth hormone releasing factor, nerve growth factor (NGF), granulocyte-colony stimulating factor (G-CSF), granulocyte macrophage-colony stimulating factor (GM-CSF), macrophage-colony stimulating factor (M-CSF), blood clotting factor, insulin, oxytocin, vasopressin, adrenocorticotropic hormone, epidermal growth factor, platelet-derived growth factor (PDGF), prolactin, luliberin, luteinizing hormone releasing hormone (LHRH), LHRH agonists, LHRH antagonists, somatostatin, glucagon, interleukin-2 (IL-2), interleukin-11 (IL-11), gastrin, tetragastrin, pentagastrin, urogastrone, secretin, calcitonin, enkephalins, endorphins, angiotensins, thyrotropin releasing hormone (TRH), tumor necrosis factor (TNF), tumor necrosis factor related apoptosis inducing ligand (TRAIL), heparinase, bone morphogenic protein (BMP), human atrial natriuretic peptide (hANP), glucagon-like peptide (GLP-1), renin, bradykinin, bacitracins, polymyxins, colistins, tyrocidine, gramicidins, cyclosporins, small interference RNA (siRNA), plasmid DNA, and antisense oligodeoxynucleotide (AS-ODN).

28. The formulation according to claim **1**, wherein said self-assembling first peptide has the amino acid sequence of Ac-$(RADA)_4$-$CONH_2$ (SEQ ID NO: 3) and said self-assembling second peptide has the amino acid sequence of Ac-$(KLDL)_3$-$CONH_2$ (SEQ ID NO: 7).