

CLAIMS

1. A method of generating a nanoparticle comprising contacting
 - a) a fusion protein (A), said fusion protein (A) comprising an antibody (A1) and a positively charged polypeptide (A2) that has a net charge of at least +5;
 - b) a positively charged polypeptide (B) that has a net charge of at least +5; and
 - c) a negatively charged molecule (C);thereby forming a nanoparticle.
2. The method of claim 1, wherein the molar ratio between the positively charged polypeptide (B) and the fusion protein (A) is at least about 10:1.
3. The method of claim 1 or 2, wherein the antibody (A1) comprises a heavy chain and a light chain.
4. The method of any one of the preceding claims, wherein in the fusion protein (A) the positively charged polypeptide (A2) is fused to the C terminus of a heavy chain of the antibody (A1) and/or the C terminus of a light chain of the antibody (A1).
5. The method of any one of the preceding claims, wherein the antibody (A1) is specific for a cell surface molecule.
6. The method of any one of the preceding claims, wherein the negatively charged molecule (C) is a nucleic acid.
7. The method of any one of the preceding claims, wherein the negatively charged molecule (C) has a molecular weight of about 20 kDa or less.
8. The method of any one of the preceding claims, wherein the positively charged polypeptide (B) is a protamine or histone.
9. A nanoparticle obtainable by a method of any one of the preceding claims.

10. A nanoparticle comprising:
 - a) a fusion protein (A), said fusion protein (A) comprising an antibody (A1) and a positively charged polypeptide (A2) that has a net charge of at least +5;
 - b) a positively charged polypeptide (B) that has a net charge of at least +5; and
 - c) one or more negatively charged molecule(s) (C).
11. The nanoparticle of claim 9 or 10, wherein the fusion protein (A) is enriched in the outer portion of the nanoparticle.
12. The nanoparticle of any one of claims 9-11, wherein the nanoparticle has a mean diameter of about 0.05 μm to about 10 μm .
13. A composition comprising a nanoparticle of any one of claims 9-12.
14. A nanoparticle of any one of claims 9-12 or a composition of claim 13 for use in therapy.
15. A kit comprising a nanoparticle of any one of claims 9-12 or a composition of claim 13.