WHAT IS CLAIMED IS:

1. A composition comprising a plurality of intact bacterially derived minicells, comprising a first minicell composition, wherein:

(a) each minicell comprises and encloses at least 400,000 molecules of a compound that displays autofluorescence, wherein the compound is PNU-159682;

(b) the minicell is attached to a bispecific antibody comprising (i) a first arm with specificity for a minicell surface structure and (ii) a second arm with specificity for epidermal growth factor receptor (EGFR);

(c) the composition contains less than about 5 EU free endotoxin; and

(d) the composition contains minimal or no PNU-159682 and/or nucleic acid trapped on the surface of the minicells.

2. The composition of claim 1, wherein the composition further comprises a second minicell composition, wherein:

(a) each minicell in the second composition comprises and encloses a therapeutic nucleic acid molecule;

(b) each minicell in the second composition is attached to a bispecific antibody comprising (i) a first arm with specificity for a minicell surface structure and (ii) a second arm with specificity for epidermal growth factor receptor (EGFR);

(c) the composition contains less than about 5 EU free endotoxin; and

(d) the composition contains minimal or no nucleic acid trapped on the surface of the minicells.

3. The composition of claim 1 or claim 2, wherein the epidermal growth factor receptor (EGFR) is present in a brain tumor.

4. The composition of any one of claims 1 to 3, wherein the first minicell composition comprises minicells, each of which encloses at least about 200 ng of PNU-159682.

5. The composition of any one of claims 2-4, wherein the therapeutic nucleic acid molecule comprises an RNA sequence.

6. The composition of any one of claims 2-5, wherein the therapeutic nucleic acid molecule comprises or corresponds to a gene that is associated with tumor suppression selected from the p53 gene, the retinoblastoma gene, and the gene encoding tumor necrosis factor.

7. A method of making the composition of any one of claims 1-6, comprising loading a plurality of minicells with a desired compound without resort to centrifugation, comprising

(a) incubating the plurality in a volume of an incubation solution of the compound in a buffered liquid, wherein the volume is on the order of about 100 mls; and then

(b) subjecting the plurality to multiple washing steps, each comprising cross-flow filtration of the minicells with a volume of buffered liquid that is about 20 liters, wherein none of the washing steps employs centrifugation of the minicells.

8. The method of claim 7, wherein a binary ionic compound, which is different from the desired compound, is dissolved in the incubation solution to a concentration that is on the order of about 200 mM or more.

9. The method of claim 7 or 8, wherein:

(a) step (b) comprises three to five washing steps; and/or

(b) the desired compound is fluorescent; and/or

(c) the incubating is for a period of about4 hours or more; and/or

(d) the desired compound is biologically active; and/or

(e) the desired compound is a small molecule drug of about 1500 Daltons or less; and/or

(f) the small molecule drug is cytotoxic; and/or

(g) the small molecule drug is activated *in vivo*.

10. The method of any one of claims 7-9, wherein the desired compound is PNU-159682.

11. Use of an effective amount of a composition according to any of claims 1-6, in the manufacture of a medicament for treating cancer in a patient in need thereof.