CLAIMS

1. A stable oil-in-water emulsion comprising particles that are dispersed in an aqueous continuous phase, wherein the average diameter of said particles is from about 80 nm to 150 nm, wherein the average diameter does not change by more than 10% when the emulsion is stored at 4°C for one month; and wherein the emulsion comprises an oil and a cationic lipid, wherein the head group of the cationic lipid comprises a quaternary amine, and wherein:

(i) the ratio of oil:lipid (mole:mole) is at least about 8:1 (mole:mole);

(ii) the concentration of cationic lipid in said emulsion is at least about 2.5 mM; and

(iii) the cationic lipid is not DC-Cholesterol.

2. The oil-in-water emulsion of claim 1, wherein the average diameter of said particles is from about 80 nm to about 130 nm.

3. The oil-in-water emulsion of claim 1, wherein the ratio of oil:lipid (mole:mole) is from about 10:1 (mole:mole) to about 43:1 (mole:mole).

4. The oil-in-water emulsion of claim 1, wherein said oil-in-water emulsion comprises from about 0.2% to about 8% (w/v) oil.

5. The oil-in-water emulsion of claim 4, wherein said oil is squalene or squalane.

6. The oil-in-water emulsion of claim 1, wherein the oil-in-water emulsion further comprises from about 0.01% to about 2.5% (v/v) surfactant.

7. The oil-in-water emulsion of claim 6, wherein said surfactant is SPAN85 (SorbitanTrioleate), Tween 80 (polysorbate 80), or a combination thereof.

8. The oil-in-water emulsion of claim 7, wherein the oil-in-water emulsion comprises about 0.5% (v/v) Tween 80 and about 0.5% (v/v) SPAN85.

9. The oil-in-water emulsion of claim 1, wherein the cationic lipid is selected from the group consisting of: 1,2-dioleoyloxy-3-(trimethylammonio)propane (DOTAP), 1,2-dioleoyl-sn-glycero-3-ethylphosphocholine (DOEPC), N,N-dioleoyl-N,N-dimethylammonium chloride (DODAC), and N-[1-(2, 3-dioleyloxy)propyl]-N,N,N-trimethylammonium chloride (DOTMA).

10. The oil-in-water emulsion of claim 9, wherein the cationic lipid is DOTAP and the concentration of DOTAP in said emulsion is from about 2.58 mM (1.8 mg/mL) to about 7.16 mM (5 mg/mL).

11. A method for preparing the oil-in-water emulsion of claim 1, comprising: (a) directly dissolving the cationic lipid in the oil to form an oil phase; (b) providing an aqueous phase of the emulsion; and (c) dispersing the oil phase in the aqueous phase by homogenization.

12. The method of claim 11, wherein step (a) further comprises heating the oil to a temperature between about 30°C to about 65°C.

13. The oil-in-water emulsion of claim 1 further comprising an antioxidant.