CLAIMS

1. A pharmaceutical composition comprising:

a. an exosome comprising a scaffold protein which comprises Prostaglandin F2 Receptor Negative Regulator (PTGFRN) or a functional fragment thereof, wherein the scaffold protein is present at a density that is higher than the density of the scaffold protein in a native exosome, and:

b. an excipient.

2. The pharmaceutical composition of claim 1, wherein the scaffold protein comprises the amino acid sequence as set forth in SEQ ID NO: 1 without the PTGFRN signal peptide.

3. The pharmaceutical composition of claim 1, wherein the scaffold protein comprises the amino acid sequence as set forth in SEQ ID NO: 33.

4. The pharmaceutical composition of claim 1, wherein the exosome further comprises a therapeutic protein.

5. The pharmaceutical composition of claim 1, wherein the density of the scaffold protein is 2-fold to 1000-fold higher than the density of the scaffold protein in a native exosome.

6. The pharmaceutical composition of claim 5, wherein the exosome further comprises a targeting moiety.

7. The pharmaceutical composition of claim 6, wherein the targeting moiety is specific to an organ, a tissue, or a cell.

8. The pharmaceutical composition of claim 1, wherein the density of the scaffold protein is 32-fold to 400-fold higher than the density of the scaffold protein in a native exosome.

9. The pharmaceutical composition of claim 1, wherein the density of the scaffold protein is 100-fold to 200-fold higher than the density of the scaffold protein in a native exosome.

10. The pharmaceutical composition of claim 4, wherein the therapeutic protein is selected from the group consisting of:

(a) an antibody or an antigen-binding fragment thereof,

(b) an enzyme or a functional fragment thereof,

(c) a ligand or a functional fragment thereof,

(d) a receptor or a functional fragment,

(e) an antimicrobial peptide or a functional fragment,

(f) a functional fragment of any of (a)-(e), or

(g) any combination of (a)-(f).

11. The pharmaceutical composition of claim 4, wherein the therapeutic protein is fused to the scaffold protein.

12. The pharmaceutical composition of claim 1, wherein the exosome further comprises atherapeutic

compound.

13. The pharmaceutical composition of claim 12, wherein the therapeutic compound is selected from the group consisting of a nucleotide, an amino acid, a lipid, a carbohydrate, a small molecule, and any combination thereof.

14. The pharmaceutical composition of claim 12, wherein the therapeutic compound is conjugated to the scaffold protein.

15. The pharmaceutical composition of claim 1, wherein the composition is substantially free of contaminating proteins.