Claims

1. A composition comprising Norovirus genogroup II, genotype 4 (GII.4) virus-like particles (VLPs), wherein the composition is prepared by a method comprising contacting a solution containing said VLPs with at least one chromatographic material, wherein the at least one chromatographic material is an anion exchange chromatographic material, wherein the chromatographic materials used in the method do not comprise hydroxyapatite, and wherein the VLPs are present in the composition at a purity level of greater than about 90%.

2. The composition of claim 1, wherein the anion exchange chromatographic material is a DEAE-Sepharose FF resin.

3. The composition of claim 1, wherein at least one chromatographic material comprises a cation exchange chromatographic material.

4. The composition of claim 1, wherein at least one chromatographic material comprises a hydrophobic interaction chromatographic material.

5. The composition of claim 1, wherein the method further comprises a precipitation step.

6. The composition of claim 5, wherein the precipitation step is a PEG precipitation step.

7. The composition of claim 6, wherein the solution containing the VLPs is subjected to the PEG precipitation step prior to contacting the solution containing the VLPs with the anion exchange chromatographic material.

8. The composition of claim 1, wherein the method further comprises an ultrafiltration and/or diafiltration step.

9. A pharmaceutical agent comprising the composition of claim 1.

10. The pharmaceutical agent of claim 9, wherein the pharmaceutical agent comprises a vaccine.

11. The composition of claim 1, wherein the VLPs are present in the composition at a purity level of greater than about 95%.