

We Claim:

1. A method of lyophilizing a composition comprising AT-III and at least one crystallizing excipient, the method comprising exposing the composition to a first temperature for a first period of time sufficient to obtain a first composition having the at least one crystallizing excipient partially or completely crystallized, wherein the first temperature is -48 °C or below and wherein the first period of time is ~~about 4 to about 10~~ hours.
2. The method of claim 1, wherein the at least one crystallizing excipient is selected from the group consisting of alanine, mannitol, glycine, and NaCl.
3. The method of claim 1, wherein the first temperature is ~~about~~-54 °C or below.
4. The method of claim 1, wherein the first period of time is at least 5 hours.
5. The method of claim 1, wherein the at least one crystallizing excipient is alanine and NaCl.
6. The method of claim 5, wherein the alanine and the NaCl are present in the composition at ~~about~~100 mM each.

~~15. A kit comprising the lyophilized cake of claim 9, a dry component and a liquid component.~~

~~15.~~ 15. A method of lyophilizing a liquid composition comprising plasma-derived AT III, NaCl, and alanine, the method comprising:

(a) exposing the composition to -54 °C or below for ~~about 4 to about 10~~ hours such that the temperature of the composition is -48 °C or below in order to provide a first composition having one or more components therein completely or near completely crystallized; and

(b) drying the first composition to obtain a lyophilized cake.