CLAIMS:

1. A filter for isolating nucleic acid from a sample, the filter comprising at least a first porous region and a second porous region, the first porous region being arranged to be contacted in use by the sample before the second porous region, wherein the first porous region has a nominal pore size of from 2μm to 3μm, and the nominal pore size of the first porous region is greater than the nominal pore size of the second porous region.

2. The filter according to claim 1, wherein the nominal pore size of the second porous region is from 0.5μm to 1.8μm.

3. The filter according to claim 1 or claim 2, wherein the nominal pore size of the second porous region is from 0.5μm to 1.3μm.

4. The filter according to any one of the preceding claims, wherein the filter comprises a plurality of first porous regions.

5. The filter according to any one of the preceding claims, wherein the filter further comprises a third porous region, the third porous region being arranged to be contacted in use by the sample after the second porous region, the third porous region having a nominal pore size which is greater than the nominal pore size of the second porous region, optionally wherein the nominal pore size of the third porous region is substantially equal to the nominal pore size of the first porous region.

6. The filter according to any one of the preceding claims comprising a silicate, optionally wherein at least one of the first, second and optionally third porous regions comprises a silicate, optionally further wherein the filter is composed of a silicate, optionally wherein the silicate comprises a silicate glass, further optionally wherein the silicate glass comprises, or is, borosilicate glass.

7. The filter according to any one of the preceding claims, wherein the first porous region and the second porous region are formed of a fibrous material, optionally wherein the first porous region and the second porous region are each formed of a different fibrous material.

8. The filter according to any preceding claim, wherein a thickness of the filter as measured in a direction of sample flow through the filter is from 1000µm to 2000µm, optionally from 1500µm to 2000µm.

9. A nucleic acid extraction column comprising the filter according to any one of claims 1-8 for isolating nucleic acid from a sample.

10. A method of isolating nucleic acid from a sample using a filter according to any previous claim, optionally wherein the method comprises:

(i) contacting a sample comprising nucleic acid with an alcohol and a salt;

(ii) contacting a filter according to any one of claims 1 to 8 with the composition comprising nucleic acid obtained following step (i) to provide a filter having nucleic acid bonded thereto;

iii) preferably, treating the filter having the nucleic acid bonded thereto with a wash solution comprising alcohol; and

(iv) eluting at least a portion of the nucleic acid from the filter.

11. The method according to claim 10, wherein step (iv) comprises incubating the filter in an elution buffer at a temperature of 10 to 100°C, preferably not exceeding 90 °C.

12. The method according to claim 11, wherein the temperature is from 70 to 90°C, optionally from 75 to 85 °C.

13. The method according to claim 11 or claim 12, wherein incubation in step (iv) is for a time period of from 30 seconds to 2 minutes.

14. The method according to any one of claims 10 to 13 wherein the nucleic acid is eluted from the filter in step (iv) by centrifugation, optionally wherein the g-force of centrifugation is from 600 to 800g.

15. The method according to any one of claims 10 to 14, wherein the salt comprises a chaotropic agent, optionally a guanidinium salt.

16. The method according to any one of claims 10 to 15 wherein the filter is provided as a component of a nucleic acid extraction column.

17. The method according to any one of claims 10 to 16, further comprising: (v) carrying out a second elution of nucleic acid from the filter, wherein elution comprises incubating the filter in an elution buffer at a temperature not exceeding 90°C, optionally followed by centrifugation of the filter.

18. A method of purifying nucleic acid isolated from a sample, the method comprising:

(i) contacting the nucleic acid with an alcohol and a salt;

(ii) contacting a filter according to any one of claims 1 to 8 with the composition comprising nucleic acid obtained following step (i) to provide a filter having nucleic acid bonded thereto;

(iii) preferably, treating the filter having the nucleic acid bonded thereto with a wash solution comprising alcohol; and

(iv) carrying out a first elution of nucleic acid from the filter, wherein elution comprises incubating the filter in an elution buffer at a temperature of from 70 to 90°C, optionally followed by centrifugation of the filter; and

(v) carrying out a second elution of nucleic acid from the filter, wherein elution comprises incubating the filter in an elution buffer at a temperature not exceeding 90°C, optionally followed by centrifugation of the filter.

19. The method according to claim 18, wherein the incubation temperature of step (v) is lower than the incubation temperature of step (iv), optionally wherein the incubation temperature of step (v) is from 20 to 65°C.

20. The method according to any one of claims 18 to 19, wherein the salt in step (i) comprises a chaotropic agent, optionally a guanidinium salt.

21. The method according to any one of claims 10 to 20, wherein the salt in step (i) is provided in an amount such that the composition comprising nucleic acid formed from step (i) contains a concentration of from 0.05 to 10M, optionally 0.1 to 3M,

preferably 0.1 to 2M, more preferably 0.5 to 0.9M, even more preferably 0.6 to 0.7M of the salt.

22. The method according to any one of claims 10 to 21, wherein the alcohol in step (i) comprises a C_{1-3}alkanol, preferably isopropanol or ethanol, optionally wherein the alcohol is provided in an amount such that the composition comprising nucleic acid formed from step (i) contains from 25 to 40% by volume, optionally from 25 to 30% by volume of the alcohol.

23. The method according to any one of claims 18 to 22 wherein the filter is provided as a component of a nucleic acid extraction column.

24. A kit for isolating nucleic acid from a sample, the kit comprising:

(i) a filter according to any one of claims 1 to 8;

(ii) a salt (preferably a chaotropic agent, for example a guanidinium salt),

(iii) a wash agent, optionally comprising lithium;

(iii) optionally, an elution buffer; and

optionally a lysing agent.