Claims

1. A biomolecule analysis kit comprising:

a reaction container configured to perform an enzymatic reaction, the reaction container including a plurality of container-shaped portions configured so that a sample that becomes a target of analysis is supplied through a flow channel to the container-shaped portions and a base portion in which the container-shaped portions are formed,

a cover portion superposed on the base portion to cover opening portions of the container-shaped portions, the flow channel being a space between the cover portion and the base portion;

a wash buffer filled in the reaction container; and

a reagent configured to be supplied to the reaction container and used for the enzymatic reaction, wherein

at least one of the the reagent and the wash buffer contains an adsorption inhibitor for reducing an adsorption rate of at least one of the sample and the reagent with respect to the base portion,

the base portion has a hydrophobic surface on a surface at a region positioned between the adjacent container-shaped portions.

2. The biomolecule analysis kit according to claim 1, wherein fluorescence or a colorimetric signal resulting from the enzymatic reaction is configured to be detected when the enzymatic reaction is performed in the reaction container.

3. The biomolecule analysis kit according to claim 1, wherein the adsorption inhibitor is a surfactant.

4. The biomolecule analysis kit according to claim 3, wherein the surfactant is a nonionic surfactant.

5. The biomolecule analysis kit according to claim 4, wherein the nonionic surfactant is Tween 20.

6. The biomolecule analysis kit according to claim 4, wherein the nonionic surfactant is Triton-100.

7. The biomolecule analysis kit according to claim 3, wherein the concentration of the surfactant is equal to or greater than 0.0005% and equal to or less than 5%.

8. The biomolecule analysis kit according to claim 1, wherein the enzymatic reaction is an isothermal reaction.

9. The biomolecule analysis kit according to claim 1, wherein the sample that becomes a target of analysis includes any one of DNA, RNA, miRNA, mRNA, and a protein.

10. The biomolecule analysis kit according to claim 9, wherein the target substance of analysis is a nucleic acid, and the enzymatic reaction is an invader reaction.

11. The biomolecule analysis kit according to claim 1, wherein the reagent generates a signal by any one of fluorescence, light emission, pH, light absorption, and electric potential.

12. A biomolecule analysis method comprising:

feeding a reagent containing a sample into a flow channel being a space between a

cover portion and a base portion in a reaction container which has the flow channel and a plurality of container-shaped portions filled with a wash buffer such that the wash buffer that fills the plurality of container-shaped portions is sequentially replaced with the reagent; and

feeding an oil sealing solution into the flow channel and sealing the reagent into the plurality of container-shaped portions by covering opening portions of the plurality of container-shaped portions with the oil sealing solution, thereby forming the plurality of container-shaped portioninto a plurality of independent reaction containers for nucleic acid detection, wherein

at least one of the reagent and the wash buffercontains a an adsorption inhibitor; and

the reaction container has a hydrophobic surface at a region positioned between the adjacent container-shaped portions.

13. The biomolecule analysis method according to claim 12, wherein the reagent contains the adsorption inhibitor.

14. A biomolecule analysis method using the biomolecule analysis kit according to any one of claims 1 to 11, wherein

after the reagent is supplied to the container-shaped portion, the enzymatic reaction is performed in the reaction container, and the biomolecule is analyzed.