CLAIMS

[Claim 1]

An immunological measurement method for leucine-rich α2 glycoprotein (LRG) in a blood sample comprising:

bringing the sample into contact with at least first insoluble carrier particles carrying a first anti-LRG monoclonal antibody and second insoluble carrier particles carrying a second anti-LRG monoclonal antibody in a liquid phase, and

optically measuring a degree of agglutination of a complex of LRG and the first and the second insoluble carrier particles carrying the anti-LRG monoclonal antibodies,

wherein the first and the second insoluble carrier particles are latex particles having average particle sizes of 100 nm to 340 nm, respectively, and

wherein the first and the second insoluble carrier particles are latex particles having critical coagulation concentrations of 65 mM to 270 Mm, respectively.

[Claim 2]

The measurement method according to claim 1, wherein the average particle sizes of the first insoluble carrier particles carrying the first anti-LRG monoclonal antibody and the second insoluble carrier particles carrying the second

anti-LRG monoclonal antibody are the same.

[Claim 3]

The measurement method according to claim 1 or 2, wherein the first insoluble carrier particles carrying the first anti-LRG monoclonal antibody and the second insoluble carrier particles carrying the second anti-LRG monoclonal antibody are contained in same amounts in the liquid phase.

[Claim 4]

The measurement method according to any one of claims 1 to 3, wherein the blood sample is serum.

[Claim 5]

The measurement method according to any one of claims 1 to 4, wherein the immunoagglutination assay is a method based on a homogeneous method.

[Claim 6]

The measurement method according to any one of claims 1 to 5, wherein the step of bringing the blood sample into contact with the first insoluble carrier particles carrying the first anti-LRG monoclonal antibody and the second insoluble carrier particles carrying the second anti-LRG monoclonal antibody in the liquid phase comprises following

steps:

(1) bringing the sample and a first reagent containing a buffer into contact with each other in the liquid phase; and

(2) adding a second reagent containing the first insoluble carrier particles carrying the first anti-LRG monoclonal antibody and the second insoluble carrier particles carrying the second anti-LRG monoclonal antibody to the liquid phase after step (1).

[Claim 7]

The measurement method according to any one of claims 1 to 6, wherein the step of optical measuring is a step of measuring an intensity of scattered light, an absorbance or an intensity of transmitted light with an optical device.

[Claim 8]

A reagent for measuring LRG in a blood sample by an immunological measurement method comprising:
at least first insoluble carrier particles carrying a first anti-LRG monoclonal antibody and second insoluble carrier particles carrying a second anti-LRG monoclonal antibody,

wherein the first and the second insoluble carrier particles are latex particles having average particle sizes of 100 nm to 340 nm, respectively,

wherein the first and the second insoluble carrier

particles are latex particles having critical coagulation concentrations of 65 mM to 270 mM, respectively.

[Claim 9]

The measurement reagent according to claim 8, wherein the average particle sizes of the first insoluble carrier particles carrying the first anti-LRG monoclonal antibody and the second insoluble carrier particles carrying the second anti-LRG monoclonal antibody are the same.

[Claim 10]

The measurement reagent according to claim 8 or 9, wherein the first insoluble carrier particles carrying the first anti-LRG monoclonal antibody and the second insoluble carrier particles carrying the second anti-LRG monoclonal antibody are contained in same amounts.

[Claim 11]

A reagent kit for measuring LRG in a blood sample by an immunoagglutination assay comprising:

(1) a first reagent containing a buffer and

(2) a second reagent containing first insoluble carrier particles carrying a first anti-LRG monoclonal antibody and second insoluble carrier particles carrying a second anti-LRG monoclonal antibody,

wherein the first and the second insoluble carrier particles are latex particles having average particle sizes of 100 nm to 340 nm, respectively,

wherein the first and the second insoluble carrier particles are latex particles having critical coagulation concentrations of 65 mM to 270 mM, respectively.

[Claim 12]

The reagent kit according to claim 11, wherein the average particle sizes of the first insoluble carrier particles carrying the first anti-LRG monoclonal antibody and the second insoluble carrier particles carrying the second anti-LRG monoclonal antibody are the same.

[Claim 13]

The reagent kit according to claim 11 or 12, wherein the second reagent of (2) contains the first insoluble carrier particles carrying the first anti-LRG monoclonal antibody and the second insoluble carrier particles carrying the second anti-LRG monoclonal antibody in same amounts.

[Claim 14]

The reagent kit according to any one of claims 11 to 13 further comprising:

(3) LRG as a standard antigen and/or a control.