## Claims

[Claim 1] A method for detecting and quantifying galacto-oligosaccharide, which is a method for detecting and quantifying galacto-oligosaccharide in a sample containing galacto-oligosaccharide and dextrin, characterized in that the sample is caused to react with 1-phenyl-3-methyl-5-pyrazolone a derivatizing reagent to derivatize the dextrin and galacto-oligosaccharide in the sample, after which the galacto-oligosaccharide component in the sample is separated by high-performance liquid chromatography using a C30 reverse-phase chromatography column.

[Claim 2] A method for detecting and quantifying galacto-oligosaccharide according to Claim 1, characterized in that a mixed liquid of buffer solution and polar organic solvent is used as an eluent for high-performance liquid chromatography.

[Claim 3] A method for detecting and quantifying galacto-oligosaccharide according to Claim 2, characterized in that a buffer solution of pH5 to 6 is used as the buffer solution.

[Claim 4] A method for detecting and quantifying galacto-oligosaccharide according to Claim 2 or 3, characterized in that a mixing ratio (vol/vol) of buffer solution and polar organic solvent in the mixed liquid is in a range of 79/21 to 80/20 based on buffer solution/polar organic solvent.

[Claim 5] A method for detecting and quantifying galacto-oligosaccharide according to any one of Claims 2 to 4, characterized in that, for the buffer solution used in preparing the mixed liquid, at least one type selected from potassium phosphate buffer solution, potassium citrate buffer solution, ammonium formate buffer solution, and potassium acetate buffer solution is used, and for the polar organic solvent, at least one type selected from acetonitrile, methanol, ethanol, propanol, and butanol is used.

[Claim 6] A method for detecting and quantifying galacto-oligosaccharide according to any one of Claims 1 to 5, characterized in that the sample containing galacto-oligosaccharide and dextrin is a beverage or food.

[Claim 7] A method for detecting and quantifying galacto-oligosaccharide according to any one of Claims 1 to 6, characterized in that the galacto-oligosaccharide component to be separated is 4'-galactosyl lactose.

~~[Claim 8] A method for detecting and quantifying galacto-oligosaccharide according to any one of Claims 1 to 7, characterized in that, for the derivatizing reagent, one type selected from 1-phenyl-3-methyl-5-pyrazolone, 2-aminopyridine, 2-aminobenzamide, 3-aminoquinone, ethyl 4-amino benzoate, butyl 4-amino benzoate, and 4-trimethyl ammonium aniline is used.~~

[Claim 9~~8~~] A method for detecting and quantifying galacto-oligosaccharide according to any one of Claims 1 to ~~8~~7, characterized in that the C30 reverse-phase chromatography column has a stationary phase containing cis alkyl groups having double bonds.