Beta-Glucan Standard

REF 984383

1 x 50 mg

INTENDED USE

Standard for determination of beta-glucan in homogenous liquid samples using automated Thermo ScientificTM ArenaTM or GalleryTM analyzer.

This product is quality control tested by Thermo Scientific Beta-Glucan (High MW) system reagent (code 984305).

This Beta-Glucan standard is a lyophilizate containing Barley (1,3/1,4)-Beta-D-Glucan.

Purity is \geq 95 % (see the CoA/Value sheet for the purity of the lot).

STORAGE AND STABILITY

The unopened standard is stable until the end of the indicated month of expiry date when stored at 2...8 $^\circ C$ and when contamination is avoided.

Dissolved standard can be divided to aliquots and freezed once (-20...-70 $^{\circ}\text{C}\text{)}.$

WARNINGS AND PRECAUTIONS

Take the necessary precautions for the use of laboratory reagents.

STANDARD PREPARATION

- Reconstitute the lyophilizate into a 120 ml pyrex beaker with 5 ml of ethanol (99.5 %).
 - o Use distilled water if additional rinsing of the tube is needed.
- Rinse the cap as well.
- Add approximately 80 ml of distilled water and a magnet into the beaker and cover with aluminium foil.
- Heat the mixture to 100 °C and stir for an hour.
- After the beta-glucan is completely dissolved, allow solution to settle to room temperature.
- Pour out the solution into a 100 ml volumetric flask and fill up to the mark with distilled water.

The solution has a beta-glucan concentration of approximately 500 mg/l depending on the purity of the standard lot. Correct the concentration value with the purity.

See the product label for the purity of the lot.

The standard can be divided to aliquots and freezed once. The stability of the reconstituted solution is 6 months in the freezer.

PROCEDURE

The beta-glucan assay procedure is indicated in the package insert of the respective test kit.

TYPICAL AMOUNT AND PURITY

Lot.	See the CoA/Value sheet
AMOUNT	50 mg
PURITY	See the CoA/Value sheet

Concentrations are given in the CoA/Value sheet of the product. The concentrations were measured with Thermo Scientific reagents.

Differences to the nominal values could be caused by using other reagents and methods $% \left({{{\rm{D}}_{\rm{s}}}} \right)$

Materials required but not provided

Distilled water (aseptic and free of heavy metals), ethanol (99.5 %), magnetic stirrer with heater and general laboratory equipment.

Beta-Glucan (HMW) system reagent kit, Thermo Fisher Scientific Cat no $984305\,$

WASTE MANAGEMENT

Please refer to local legal requirements. It is recommended to empty the analyzer cuvette waste bin and waste water daily. Emptying should be done immediately after the analysis when using hazardous reagents/solutions.

Note: If using reagents/solutions that react with each other, cuvette waste bin and waste water should be emptied and washed between use of these reagents.

ADDITIONAL MATERIAL

Certificate of analysis and SDS are available at www.e-labeling.eu/TSF

Applications for Gallery and Arena automated analyzers are available upon request from the local sales representative. Information in the Application note can change without prior notice.

MANUFACTURER

Thermo Fisher Scientific Oy Ratastie 2, P.O. Box 100, FI-01621 Vantaa, Finland Tel. +358 10 329200 www.thermofisher.com/discreteanalysis

CONTACT INFORMATION

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Changes from previoius version

Specification for standard material added. Correction made for standard preparation temperature. General updates.