Prepared for MycoMedica

Work completed and submitted by: LF

K-YBGL with MycoMedica samples.

19AUG 2024

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Purpose

The purpose of this assay is to test beta and alpha- glucan content in customer samples following the method as described in K-YBGL 08/23.

Description of Neogen Products used.

Code	Product Name	Lot No. / Serial No.
K-YBGL	β-Glucan Assay Kit (Yeast and Mushroom)	240723-01

Description of Customer Samples

Table 1

Samples Information						
Name	Quantity (g)	Batch	Date of Expiry			
Organic Polyporus Umbellatus Ext. PRO	30 g	YZKE12240422	28-03-2028			

Results

Table 2

Determination of alpha and beta glucan using K-YBGL 08/23								
Sample		Results of sam	ples in duplicate	Average of results				
Sample Results	Total Glucan	71.86	69.63	70.75				
	Alpha-Glucan	9.19	8.95	9.07				
	Beta-Glucan	62.67	60.68	61.67				
Control Yeast β-glucan 47% L: 230501B	Total Glucan	49.99	47.81	48.90				
	Alpha-Glucan	0.86	0.87	0.86				
	Beta-Glucan	49.13	46.95	48.04				

Samples were applied to the assay procedure in duplicate with duplicate determinations.

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Conclusion

The result for the control Yeast β -glucan sample is in the acceptable range (+/- 5%) indicating that the procedure and reagents worked to specification.

The results indicate that the K-YBGL assay procedure was suitable and reliable for the batch of samples tested.

Sources of Variance

Upon reviewing the data presented in this report, it is important to consider all sources of variance when evaluating the trueness of any laboratory method.

- Sample Variance-How homogeneous is the sample being analyzed and how representative is that sample of the larger portion of material that this sample is associated with
- Equipment Variance-Are the balances, pipettors, and other laboratory instruments operating within their expected performance parameters and have they been recently calibrated
 - Technician Variance- Has the technician been trained and are they using best laboratory practices when performing the analysis
 - Assay Variance-What is the expected variance of the assay based on historical performance and validation data made available by the method provider

These major sources of variance compounded demonstrate the total variance in the data generated by any method.

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