



Megazyme Building 1,  
Bray Business Park,  
Bray, Co. Wicklow,  
A98 YV29,  
Ireland.  
Tel: + 353 1 2861220 Fax: + 353 1 2861264

## Certificate of Analysis

**Product:** *exo*-1,3- $\beta$ -D-Glucanase +  $\beta$ -Glucosidase  
**Cat. No:** E-EXBGOS  
**Lot. No:** 210901  
**Expiry Date:** December, 2025

### Specific activity and level of other activities:

#### Activity:

##### **100 U/mL *exo*-1,3- $\beta$ -D-Glucanase**

One Unit of *exo*-1,3- $\beta$ -glucanase activity is the amount of enzyme required to release one  $\mu$ mole of glucose per minute from laminarin (10 mg/mL; *Laminaria digitata*) in sodium acetate buffer (100 mM), pH 4.0 and 40°C.

##### **20 U/mL $\beta$ -Glucosidase**

One Unit of  $\beta$ -glucosidase activity is defined as the amount of enzyme required to release one  $\mu$ mole of p-nitrophenyl per minute from p-nitrophenyl  $\beta$ -glucoside in sodium acetate buffer (100 mM), pH 4.0 at 40°C.

#### Specificity:

***exo*-1,3- $\beta$ -glucanase:** Successive hydrolysis of  $\beta$ -D-glucose units from the non-reducing ends of (1,3)- $\beta$ -D-glucans, releasing  $\alpha$ -glucose.

**$\beta$ -glucosidase:** Hydrolysis of terminal, non-reducing  $\beta$ -D-glucosyl residues with release of  $\beta$ -D-glucose.



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**Rates of Hydrolysis of substrates**

Substrate	U/mL
Laminarin	100
Laminaridextrin	~ 110
Scleroglucan	~ 60.0
<i>p</i> -Nitrophenyl $\beta$ -glucoside	~ 20.0
CM-Cellulose 4M	~ 2.5
Starch	< 0.01
Ceralpha	< 0.01

Actions on *p*NP-substrates, polysaccharides or oligosaccharides was determined at a final substrate concentration of 2.5 mM and 5 mg/mL, respectively, in sodium acetate buffer (100 mM), pH 4.0 at 40°C.

This lot meets our specification.

Signature: 

Date: 19.Oct.2021

Ida Lazewska  
Quality Control Laboratory Manager

*(as this certificate is a computer printout, it has not been signed or dated by hand)*