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

Certificate of Analysis

Product: Pullulanase M2 (*Bacillus licheniformis*)
Cat. No: E-PULBL
Lot. No: 151102D
Expiry Date: December, 2026

Specific activity and level of other activities:

78 U/mg protein (on borohydride reduced pullulan) at pH 5.0 and 40°C
One Unit of pullulanase activity is defined as the amount of enzyme required to release one µmole of glucose reducing-sugar equivalents per minute from pullulan (10 mg/mL) in sodium acetate buffer (100 mM), pH 5.0 at 40°C.

Enzyme	%
Pullulanase	100
α-Amylase	< 0.15
exo-α-glucanase	< 0.0005
*p*NP-α-L-glucopyranoside	< 0.000001

This lot meets our specification.

Signature: Ciara McLoughlin **Date:** 10.Nov.2022

Ciara McLoughlin

QC Specialist

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

© 2023, Neogen Corporation; © 2023, Megazyme. All rights reserved.
Neogen is a registered trademark of Neogen Corporation. Megazyme is a registered trademark of Megazyme Ltd.