

Safety evaluation of the food enzyme glucan 1,4- α -maltohydrolase from the genetically modified *Bacillus licheniformis* strain DP-Dzb115

1 Report

Status Finished

EFSA question number [EFSA-Q-2025-00014](#)

Adopted 15-04-2026

Previous authorisations The applicant has submitted a dossier in support of the application for authorisation of the food enzyme glucan 1,4- α -maltohydrolase from *B. licheniformis* DP-Dzb115. Additional information were requested during the risk assessment phase.

2 Production method

Manufacturing The production strain is grown as a pure culture using a typical industrial medium in a submerged batch or fed-batch fermentation system with conventional process controls in place

Formulation Unknown

Downstream processing After completion of the fermentation, the solid biomass is removed from the fermentation broth by filtration. The filtrate containing the enzyme is further purified and concentrated, including an ultrafiltration step in which the enzyme protein is retained, while most of the low molecular mass material passes the membrane and is discarded

Average TOS (w/w) 13.7 %

Average activity/TOS 66.3 MAAB/mg TOS

3 EFSA tested impurities

Production strain and recombinant DNA The absence of viable cells of the production strain in the food enzyme was analysed in triplicate. No colonies of the production strain were detected. The absence of recombinant DNA in the food enzyme was demonstrated



Allergenicity The Panel considered that the results of the sequence homology search and the available literature do not indicate a risk of allergic reactions upon dietary exposure to the food enzyme under assessment

Antimicrobial resistance No antimicrobial activity was detected in any of the tested batches

Antifoam agents /

Other /

Pathogens

Microbiological quality indicators

Metals

Comments LoD: Pb = 0.01 mg/kg.