



This is a provisional English translation of an excerpt from the original full report.

Safety Assessment Report

Glucose oxidase produced using JPAo009 strain

(Genetically Modified Food)

Food Safety Commission of Japan (FSCJ)
March 2023

ABSTRACT

The FSCJ conducted a safety assessment of “Glucose oxidase produced using the JPAo009 strain.”

This additive is a glucose oxidase produced using the JPAo009 strain, which was developed by introducing a glucose oxidase transgene derived from the *Aspergillus niger* BO-1 strain into the *Aspergillus oryzae* IFO4177 strain as a host. The additive is an enzyme which oxidizes glucose to produce D-glucono-1,5 lactone and hydrogen peroxide, and is used in bread production.

Referring to the “Standards for Safety Assessments of Food Additives Produced Using Genetically Modified Microorganisms¹”, evaluations were conducted on the safety of the inserted gene and the toxicity and allergenicity of the protein produced from the inserted gene, which indicated no additional factor that could impair safety compared to conventional additives.

Therefore, it has been concluded that “Glucose oxidase produced using the JPAo009 strain” is unlikely to pose safety concerns relevant to human health.

¹ Decision of the FSCJ dated March 25, 2004