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

Safety Assessment Report

Cellulase produced using JPAN011 strain

(Genetically Modified Food)

Food Safety Commission of Japan (FSCJ)
June 2025

ABSTRACT

The FSCJ conducted a safety assessment of “Cellulase produced using the JPAN011 strain.”

This additive is a cellulase produced using the JPAN011 strain developed by introducing a cellulase transgene derived from the *Trichoderma reesei* QM6a strain into the *Aspergillus niger* BO-1 strain as a host. This additive is an enzyme that hydrolyzes the glycosidic bonds of β-1,4-glucan in cellulose which is a linear polymer of glucose. This additive is added in the processing of plant materials such as vegetables and fruits to enhance the yield of extracts and juices.

The safety assessment was conducted referring to the "Guidelines for Safety Assessments of Food Additives Produced Using Genetically Modified Microorganisms[1]". Specifically, evaluations were conducted on the donor of the inserted gene, the safety of the inserted gene including the identification of inserted base sequences, and the toxicity and allergenicity of the protein expressed by the inserted gene, which confirmed no additional factors that could impair safety compared to conventional additives.

Therefore, FSCJ concluded that “Cellulase produced using the JPAN011 strain” is unlikely to pose safety concerns relevant to human health.

[1] Decision of the FSCJ dated March 25, 2004