



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

## Safety Assessment Report

### Hemicellulase produced using JPAN007 strain

(Genetically Modified Foods and Feeds)

Food Safety Commission of Japan (FSCJ)

June 2021

#### ABSTRACT

FSCJ conducted a safety assessment of an additive, hemicellulase, produced using JPAN007 strain based on the documents submitted by the applicant.

This additive is hemicellulase produced by JPAN007 strain which was generated through the introduction of hemicellulase gene originated from *Talaromyces leycettanus* CBS 398.68 strain into *Aspergillus niger* BO-1 as the host. This enzyme hydrolyzes 1,4- $\beta$ -D-mannoside bonds of mannan in an endo-manner, and is used for productivity and quality improvements in instant coffee production.

The documents were evaluated based on the “Standards for Safety Assessments of Food Additives Produced Using Genetically Modified Microorganisms<sup>1</sup>”, from the standpoint of the safety of the inserted gene, and toxicity and allergenicity of the protein produced from the inserted gene, and so on. As the result, FSCJ determined that newly produced adverse effects on humans derived from this additive are unlikely based on the comparison between this additive and the conventional counterpart.

Consequently, FSCJ concluded that “hemicellulase produced by JPAN007 strain” has no concern relevant to human health.

---

<sup>1</sup> Decision of the Commission dated 25 March 2004.