



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

## Safety Assessment Report

### Glucoamylase produced using JPAN 001 strain

(Genetically Modified Foods and Feeds)

Food Safety Commission of Japan (FSCJ)

July 2018

#### ABSTRACT

FSCJ conducted a safety assessment of glucoamylase produced using JPAN 001 strain, based on the documents submitted by the applicant.

The JPAN 001 strain was generated through introduction of glucoamylase gene into *Aspergillus niger* BO-1 strain. The glucoamylase gene is originated from *Gloeophyllum trabeum* NN055575. This glucoamylase, an enzyme hydrolyzing polysaccharides such as amylose and amylopectin at the 1,4-alpha glycosidic linkage from the non reducing ends to form  $\beta$ -D-glucose, is used in order to achieve efficient saccharification in the process of starch sugar production.

The safety of the inserted gene, toxicity and allergenicity of the protein produced from the inserted gene, and others were evaluated based on the “Standards for the Safety Assessment of Food Additives Produced Using Genetically Modified Microorganisms<sup>1</sup>”. None of the newly generated safety concerns were detected in comparison with conventional additives without genetical modification.

Consequently, FSCJ concluded that the glucoamylase produced using produced using JPAN 001 strain has no concern relevant to human health.

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