



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

Safety Assessment Report

Hemicellulase produced using JPTR001 strain

(Genetically Modified Foods and Feeds)

Food Safety Commission of Japan (FSCJ)

August 2018

ABSTRACT

FSCJ conducted a safety assessment of “Hemicellulase produced using JPTR001 strain” based on the documents submitted by the applicant.

This additive is a hemicellulase (arabinofuranosidase) produced using JPTR001 strain, which is generated through the introduction of a gene for arabinofuranosidase originated from *Talaromyces pinophilus* ATCC 36839 strain into *Trichoderma reesei* QM6a strain as the host. This enzyme is an exo-acting type enzyme that hydrolyses terminal, non-reducing α -1,2- or α -1,3-linked L-arabinofuranose residue in arabinoxylans. This enzyme is used for yield improvement in the producing process of starch sugar.

The documents, evaluated based on the “Standards for Safety Assessments of Food Additives Produced Using Genetically Modified Microorganisms¹”, included the safety of the inserted gene, and toxicity and allergenicity of the protein produced from the inserted gene. Consequently, newly produced adverse effects on humans derived from this additive are unlikely based on the comparison between this line and the conventional counterpart.

Consequently, FSCJ concluded that the hemicellulase produced using JPTR001 strain has no concern relevant to human health.

¹ Decision of the Commission dated 25 March 2004.