



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

Safety Assessment Report

Alpha-amylase produced using JPBL010 strain (Genetically Modified Food)

Food Safety Commission of Japan (FSCJ)
February 2022

ABSTRACT

The FSCJ conducted a safety assessment of a food additive, α -amylase produced using JPBL010 strain.

This additive is α -amylase produced using JPBL010 strain which was generated through the introduction of the modified α -amylase gene derived from *Geobacillus stearothermophilus* C599 strain into *Bacillus licheniformis* Ca63 strain as a host. This enzyme hydrolyzes α -1,4 bonds of glucose polymer. It produces dextrans and oligosaccharides, and is used to prevent aging of bread.

Referring to “Standards for Safety Assessments of Genetically Modified Food Additives produced Using Genetically Modified Microorganisms”¹, the FSCJ confirmed the following:

- i. the safety of the inserted gene; and
- ii. the toxicity and allergenicity of the protein produced from the inserted gene, and others.

Consequently, any new safety concerns were not identified, compared with conventional additives.

The FSCJ concluded that “ α -amylase produced using JPBL010 strain” has no concern relevant to human health.

¹ Decision of the FSCJ dated March 25, 2004