

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

Safety Assessment Report

Phospholipase produced using JPAo011 strain (Genetically Modified Food)

Food Safety Commission of Japan (FSCJ)
January 2024

ABSTRACT

The FSCJ conducted a safety assessment of “Phospholipase produced using the JPAo011 strain.”

This additive, phospholipase A1 (lip182), was produced using the JPAo011 strain, which was developed using the *Aspergillus oryzae* IFO4177 strain as a host, and introducing a phospholipase transgene derived from the *Valsaria rubricosa* ATCC24940 strain. This resulting additive is an enzyme that hydrolyzes the ester bond at the sn-1 position of phospholipids to produce lysophospholipids and fatty acids, thereby utilized to enhance the quality of dough for baking bread.

Referring to the “Standards for Safety Assessments of Food Additives Produced Using Genetically Modified Microorganisms¹,” evaluations were conducted regarding the safety of the inserted gene and the toxicity and allergenicity of the protein produced from the inserted gene, which indicated no additional factors that could impair safety compared to conventional additives.

Therefore, it has been concluded that “Phospholipase produced using the JPAo011 strain” is unlikely to pose safety concerns relevant to human health.

¹ Decision of the FSCJ dated March 25, 2004