

## CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by TUV SUD America Inc.  
 Certificate Number. 951001163

Catalogue Number	J64019
Lot Number	N10M063
Description	Cellulase, chromatographically purified, T. reesei
CAS Number	9012-54-8
Quality Test/Release Date	11/Feb/2026
Suggested retest date	11/Feb/2031
Country of Origin	United States

Result Name	Units	Specifications	Test Value
Assay	u/mg dw	≥45 units per mg (dry weight) One Unit liberates 0.01 mg of glucose per hour from microcrystalline cellulose at 37°C.	145
Comment		pH 5.0	Conforms
Appearance (Color)		White to pale cream	White
Enzymatic Activity		Lipase : Reported assay value	None detected
Enzymatic Activity		Nuclease : Reported assay value	None detected
Enzymatic Activity		Protease : Reported assay value	None detected
Form		Lyophilized powder	Lyophilized powder
Specific Absorbance (E 1%/1cm)		A280nm (1 mg/ml) : Reported assay value	1.41



Derek Roy  
 Quality Manager, LCD

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.