

Thermo Fisher Scientific

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## **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

Catalanua Nurahan	162045		
Catalogue Number	J63045		
Lot Number	S06L034		
Description	L-Isoleucine, Cell Culture Reagent		
CAS Number	73-32-5		
Quality Test/Release Date	06/Jun/2025		
Suggested retest date	06/Jun/2030		
Country of Origin	China		
Result Name	Units	Specifications	Test Value
Assay from Suppliers CofA	%	≥98.5%	100.3
Appearance (Color)		White	White
Form		Powder or crystals or crystalline powder	Crystalline powder
Heavy Metals	ppm	≤15 ppm	<15
Residue on ignition	%	≤0.3%	0.0
Impurity content	ppm	Arsenic (As): ≤1.5 ppm	<1.5
Impurity content	%	Chloride (Cl): ≤0.05%	<0.05
Impurity content	ppm	Iron (Fe): ≤30 ppm	<30
Impurity content	%	Sulfate (SO₄): ≤0.03%	<0.03
Loss on Drying	%	≤0.3%	0.10
Optical Rotation		+38.9 to +41.8	+40.7
рН		5.5-7.0	6.2

John Astarita

John Astarita Director, Quality

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.