

## 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	J67572
Lot Number	Y15L514
Description	Ringer's Solution, lactate-buffered
Quality Test/Release Date	19/Nov/2025
Suggested retest date	19/Nov/2027
Country of Origin	Canada
Declaration of Origin	Synthetic
BSE/TSE	Not directly derived from or manufactured with any animal byproducts in any way (including but not limited to fermentation or nutrient broth, catalysts, enzymes).

Result Name	Units	Specifications	Test Value
Composition		100mM sodium chloride, 3.7mM potassium chloride, 1.3mM calcium chloride, 1.2mM magnesium sulfate, 28mM sodium bicarbonate, and 20mM sodium lactate	Conforms
Comment		All components are dissolved in UV treated 18.2 megohm-cm ± 1 water, followed by pH adjustment and filtered through 0.22 micron filter.	Conforms
Appearance (Color)		Clear colorless	Clear colorless
Form		Liquid	Liquid
pH		7.4 ± 0.15	7.4 ± 0.15



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.