

Antibiotic Testing Procedure

Introduction

At Gold Biotechnology we make sure each of our products is thoroughly tested to the highest standards. In addition to a typical certificate of analysis (COA), we also test our antibiotics through a modified version of the Kirby-Bauer method, also known as the disk diffusion method. For a Gold Bio video of the [Kirby-Bauer method, visit our video library!](#) The test compares a specific antibiotic's ability to prevent bacterial growth to a common set of standards created by the CLSI (Clinical Laboratory Standards Institute) to assure its functionality at a certain concentration.

As a control, we use a sensitive strain of bacteria, in order to determine the antibiotics effectiveness, and a resistant strain to assure that the antibiotic is pure. We test every lot received with this procedure.

A sample of the data for a lot of Kanamycin [[Kanamycin Monosulfate, GoldBio Catalog # K-120](#)] is detailed below:

			Zone of Inhibition				
			CLSI Standard	Resistant Bacteria	Sensitive Bacteria		
Antibiotic	Solvent	Potency	Resistant	Sensitive	Measured	Measured	Compliance
Kanamycin	H ₂ O	30 µg	≤13 mm	≥18 mm	5 mm	20 mm	Yes

As you can see, the Zone of Inhibition for the sensitive bacterial strain exceeds the minimum requirements while the resistant strain is less than the maximum standard, showing that the antibiotic is effective and the correct substance.

If you have any additional questions about our testing procedures, or need the results from a specific lot or a product, please contact us by phone at (314) 890-8778, email at contactgoldbio86@goldbio.com or by visiting <http://www.goldbio.com>.