Datasheet for ABIN997089

Streptomycin ELISA Kit

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Overview

Quantity:	96 tests
Target:	Streptomycin
Reactivity:	Streptomyces
Method Type:	Sandwich ELISA
Application:	ELISA

Product Details

Purpose:	Streptomycin quantitative test is based on the principle of the enzyme-linked immunosorbent assay.
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	1 ng/mL

Target Details

Target:	Streptomycin
Abstract:	Streptomycin Products
Target Type:	Chemical

Application Details

Assay Time:	1 h

Application Details

Plate:	Pre-coated
Assay Procedure:	1. Prepare samples as described above. 2. Pipette 100 µL standards or prepared samples in duplicate into the appropriate wells of the microtiter plate. Immediately add 50 µL anti-streptomycin antibody into each well. 3. Cover the microtiter plate with a plastic foil and incubate for 30 minutes at room temperature. 4. Without preceding washing add 50 µL streptomycin-peroxidase conjugate into each well. 5. Cover the microtiter plate with a plastic foil and incubate additional 15 minutes at room temperature. 6. Wash the plate three times as follows: Discard the contents of the wells (dump or aspirate). Pipette 300 µL of diluted washing solution into each well. After the third repetition empty the wells again and remove residual liquid by striking the plate against a paper towel. The wash procedure is critical. Insufficient washing will result in poor precision and falsely elevated absorbencies. 7. Pipette 100 µL of substrate solution into each well. 8. Allow the reaction to develop in the dark (e.g. cupboard or drawer, the chromogen is light-sensitive) for 15 minutes at room temperature. 9. Stop enzyme reaction by adding 100 µL of stop solution (0.5 M H_2SO_4) into each well. The blue colour will turn yellow upon addition. 10. After thorough mixing, measure absorbance at 450 nm (reference wavelength 620 nm), using an ELISA reader. The colour is stable for 30 minutes.
Calculation of Results:	1. Calculate the average optical density (OD 450 nm) for each set of reference standards or samples. 2. Construct a standard curve by plotting the mean optical density obtained for each reference standard against its concentration in ng/mL on semi-log graph paper with the optical density on the vertical (y) axis and the concentration on the horizontal (x) axis. 3. Using the mean optical density value for each sample, determine the corresponding concentration of streptomycin in ng/mL from the standard curve. Depending on experience and/or the availability of computer capability, other methods of data reduction may be employed. 4. The diluted samples must be further converted by the appropriate sample dilution factor. The factors are listed for each sample matrix in the sample preparation section. Note: Due to matrix effects some negative samples may show a certain blank value. In validation experiments this

Application Details

	was determined to be around 1-2 ng/mL. This value has to be considered as the limit of detection of the method. TYPICAL STANDARD VALUES The following table contains an example for a typical standard curve. The binding is calculated as percent of the absorption of the 0 ng/mL standard. These values are only an example and should not be used instead of the standard curve which has to be measured in every new test. Streptomycin (ng/mL) % binding of 0 ng/mL) 0 100 2 73 5 53 20 33 50 14 200 7
Restrictions:	For Research Use only

Handling

Storage:	4 °C
Storage Comment:	Store at 2-8 °C