

Datasheet for ABIN956220 Ig ELISA Kit

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Overview

Quantity:	96 tests
Target:	Ig
Binding Specificity:	Chain kappa
Reactivity:	Human
Method Type:	Sandwich ELISA
Application:	ELISA

Product Details

Purpose:	The Human Kappa ELISA is a highly sensitive two-site enzyme-linked immunoassay (ELISA) for the quantitative determination of kappa in human biological samples.
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Characteristics:	<p>In this assay the kappa present in samples reacts with the anti-kappa antibodies which have been adsorbed to the surface of polystyrene microtiter wells. After the removal of unbound proteins by washing, anti-kappa antibodies conjugated with horseradish peroxidase (HRP), are added. These enzyme-labeled antibodies form complexes with the previously bound kappa. Following another washing step, the enzyme bound to the immunosorbent is assayed by the addition of a chromogenic substrate, 3,3',5,5'- tetramethylbenzidine (TMB). The quantity of bound enzyme varies directly with the concentration of kappa in the sample tested, thus, the absorbance, at 450 nm, is a measure of the concentration of kappa in the test sample. The quantity of kappa in the test sample can be interpolated from the calibration curve constructed from the calibrators, and corrected for sample dilution.</p>

Product Details

Components:	<ol style="list-style-type: none">1. Diluent Concentrate: One bottle containing 50 mL of a 5X concentrated diluent running buffer.2. Wash Solution Concentrate: One bottle containing 50 mL of a 20X concentrated wash solution.3. Enzyme-Antibody Conjugate Concentrate: One vial containing 150 µL of a 100X concentrated affinity-purified anti-human kappa antibody conjugated with HRP in stabilizing buffer.4. TMB Substrate Solution: One vial containing 12 mL of TMB and hydrogen peroxide in citric acid buffer at pH 3.3.5. Stop Solution: One vial containing 12 mL of 0.3 M sulfuric acid. WARNING: Avoid contact with skin.6. Microtiter Plate: Twelve removable eight-well strips in well holder frame. Wells are coated with affinity-purified anti-human kappa.7. Human Kappa Calibrator: One vial containing Human Kappa Calibrator.
Material not included:	<p>Precision pipettes (2 µL to 200 µL) for making and dispensing dilutions</p> <p>Test tubes</p> <p>Microplate washer/aspirator</p> <p>Distilled or de-ionized H₂O Microplate reader</p> <p>Assorted glassware for the preparation of reagents and buffer solutions</p> <p>Timer</p> <p>Vortex mixer</p>

Target Details

Target:	Ig
Alternative Name:	Immunoglobulin Ig (Ig Products)

Application Details

Plate:	Pre-coated
Reagent Preparation:	<ol style="list-style-type: none">1. Diluent Concentrate: The Diluent solution supplied is a 5X concentrate and must be diluted 1:5 with distilled or de-ionized water.2. Wash Solution Concentrate: The Wash Solution supplied is a 20X concentrate and must be diluted 1:20 with distilled or de-ionized water. Crystal formation in the concentrate is not uncommon when storage temperatures are low. Warming of the concentrate to 30-35°C before dilution can dissolve crystals.3. Enzyme-Antibody Conjugate Concentrate: Calculate the required amount of working

Application Details

- conjugate solution for each microtiter plate test strip by adding 10 μ L Enzyme-Antibody Conjugate to 990 μ L of 1X Diluent for each test strip to be used for testing. Mix uniformly, but gently. Avoid foaming.
4. TMB Substrate Solution: Ready to use as supplied.
5. Stop Solution: Ready to use as supplied.
6. Microtiter Plate: Ready to use as supplied. Unseal microtiter pouch and remove plate from pouch. Remove all strips and wells that will not be used in the assay and place back in pouch and re-seal along with desiccant.
7. Human Kappa Calibrator: The calibrator is now at a concentration of 9.9 mg/mL. Prepare the Human Kappa Calibrators immediately prior to use according to the table below. Mix well between each step. Avoid foaming.

Calculation of Results:

1. Subtract the average background value from the test values for each sample.
 2. Using the results observed for the calibrators construct a calibration curve. The appropriate curve fit is that of a four- parameter logistics curve, although a second order polynomial (quadratic) or other curve fits may also be used.
 3. Interpolate test sample values from calibration curve. Correct for sample dilution factor to arrive at kappa concentration in original sample.
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1. Reliable and reproducible results will be obtained when the assay procedure is carried out with a complete understanding of the information contained in the package insert instructions and with adherence to good laboratory practice.
 2. Factors that might affect the performance of the assay include proper instrument function, cleanliness of glassware, quality of distilled or de-ionized water, and accuracy of reagent and sample pipettings, washing technique, incubation time or temperature.

Restrictions:

For Research Use only

Handling

Storage:

4 °C

Storage Comment:

1. Complete Kit: The expiration date for the kit is stated on the outer label. The recommended storage temperature is 4°C. Note: See long term storage recommendations below for the Human Kappa Calibrator.
2. Diluent: The 5X Diluent Concentrate is stable until the expiration date. The 1X working solution is stable for at least one week from the date of preparation. Both solutions should be stored at 4°C.

3. Wash Solution: The 20X Wash Solution Concentrate is stable until the expiration date. The 1X working solution is stable for at least one week from the date of preparation. Both solutions can be stored at room temperature (RT, 16-25°C) or at 4°C.
4. Enzyme-Antibody Conjugate: Undiluted anti-kappa-HRP conjugate should be stored at 4°C and diluted immediately prior to use. The working conjugate solution is stable for up to 8 hours.
5. TMB Substrate Solution: The TMB Substrate Solution should be stored at 4°C and is stable until the expiration date.
6. Stop Solution: The Stop Solution should be stored at 4°C and is stable until the expiration date.
7. Microtiter Plate: Anti-human kappa coated wells are stable until the expiration date, and should be stored at 4°C in the sealed foil pouch with desiccant pack.
8. Human Kappa Calibrator: Long term storage: Upon receipt, aliquot the calibrator and store them frozen. They will be stable until expiration date. Short term storage: The calibrator is stable for up to 14 days at 4°C. The working calibrator solutions should be prepared immediately prior to use and are stable for up to 8 hours.

Expiry Date:	The expiry date is stated on the label.
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