Datasheet for ABIN4886396

Rituximab ELISA Kit

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Overview

Quantity:	96 tests
Target:	Rituximab
Reactivity:	Chemical
Method Type:	Sandwich ELISA
Detection Range:	5-100 ng/mL
Minimum Detection Limit:	5 ng/mL
Application:	ELISA

Product Details

Purpose:	Quantification of Rituximab in biological matrices
Sample Type:	Plasma, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Rituximab (Rituxan)
Cross-Reactivity (Details):	hIgG1 and Infliximab prepared at 250 ng/ mL were assayed and exhibited no cross-reactivity or interference
Components:	Coated microtiter plate, 96 wells Calibrator diluent. - 1.8ml Calibrator 12ul 10X wash buffer - 25ml Assay buffer - 50ml

Product Details

	1000X detection reagent - 17ul TMB - 12ml TMB stop solution - 12ml Plate sealers - 3
Material not included:	Precision pipettes calibrated to deliver 5-1000µL Multi-channel pipette calibrated to deliver 50-200µL Plate shaker Disposable tips Vortex-Mixer Distilled or de-ionized water Microplate reader capable of reading 450nm with background subtrac

Target Details

Target:	Rituximab
Abstract:	Rituximab Products
Target Type:	Antibody
Background:	Rituximab is a chimeric monoclonal antibody used in the treatment of diseases characterized by abnormal or excessive B cells. Rituximab targets CD20, which is expressed on the surface of B cells, to induce apoptosis in B cells and is used in the treatment of leukemias and lymphomas, some autoimmune disorders, and organ transplant. A quantitative method for Rituximab has been developed and optimized for pharmacokinetic assessment of samples
Gene ID:	931

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Sample Volume:	15 µL
Assay Time:	2.5 h
Plate:	Pre-coated
Protocol:	The Rituximab ELISA kit is designed to measure free Rituximab with high specificity and sensitivity . This assay employs the sandwich enzyme immunoassay technique. A precoated anti-Rituximab 96 well plate is provided. Calibrator, quality control samples and test samples are pipetted into the appropriate wells. Rituximab present in biological matrices is bound by the

	immobilized capture antibody. After washing away any unbound substances, enzyme linked detection antibody is added to the wells. The plate is washed to remove any unbound antibody-enzyme reagent and a substrate solution is added to the wells for color development. The color development is proportional to the amount of Rituximab present in test samples and the concentration is calculated from the standard series.
Reagent Preparation:	Prepare the appropriate amount of required reagent on the day of use. Store all reagents as per instructions stated on the label. 1. Wash Buffer (1X) Preparation: Dilute wash buffer concentrate with ultra-pure water 1/10 before use (for example add 20 mL concentrate to 180 mL ultra-pure water). Mix well. 2. Detection Reagent (1X) Preparation: Dilute detection reagent with assay buffer 1/1000 before use (for example add 11 µL concentrate to 11 mL of assay buffer). Mix well. 3. Preparation of Calibrators: Prepare calibrators with concentrations ranging from 5000 ng/mL to 250 ng/ mL. The following is an example calibrator curve.
Sample Collection:	This kit is compatible with EDTA-plasma, heparinplasma and serum samples. Samples can be stored at or below -20 °C for up to 1 year.
Sample Preparation:	Dilute calibrators and test samples 1/50 with assay buffer (for example add 5µL of prepared calibrator or sample to 245µL of assay buffer). Mix well. *Note that test samples may require further dilution when peak values are predicted to exceed 5 µg/mL. Do not store diluted samples.
Assay Procedure:	This assay employs the sandwich enzyme immunoassay technique. Anti- Rituximab is coated onto a 96 well microplate. Calibrator, quality control samples (if desired) and test samples are pipetted into the appropriate wells. Rituximab present in biological matrices is bound by the immobilized anti- Rituximab antibody. After washing away any unbound substances, enzyme linked anti- Rituximab antibody is added to the wells. This antibody is developed and purified specifically against truncated Rituxan® (domain residing in Fc portion of the Rituxan® molecule). The plate is washed to remove any unbound antibody-enzyme reagent and a substrate solution is added to the wells for color development. The color development is proportional to the amount of Rituximab present in test samples. The color development is stopped and the intensity of the color is measured.
Calculation of Results:	1. Construct a standard curve by plotting the absorbance obtained from each standard against concentration. Use a 4 or 5 parameter curve fit. Alternatively a log-log curve fit may be used. 2. The concentration of the unknowns can be read directly from this standard curve using the absorbance value for each sample. 3. Any sample undiluted or diluted still reading greater than the highest standard should be diluted appropriately with calibrator diluent and retested. If the samples have been diluted, the concentration determined from the standard curve must be

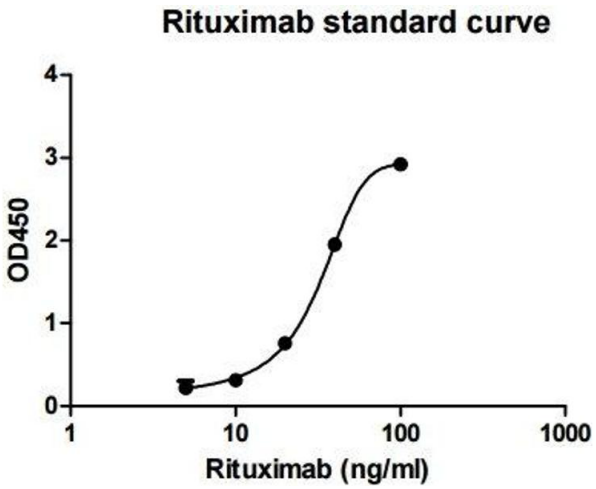
Application Details

	multiplied by the dilution factor.
Assay Precision:	Precision: The precision was determined by analyzing samples prepared at 1000 ng/mL in 6 replicates on 6 different occasions. Intra-assay coefficient of variation (CV) < 10%. Inter-assay CV < 10%. Recovery: 1000 ng/mL of Rituximab was spiked in 10lots of human serum. Recovery ranges are from 92-117% with an average recovery of 94%.
Restrictions:	For Research Use only

Handling

Preservative:	Without preservative
Precaution of Use:	Read manual completely before beginning
Storage:	-20 °C
Storage Comment:	Store kit components at -20°C unless specified otherwise. DO NOT USE past kit expiration date. Some vials contain a small amount of reagents. Spin tubes on pulse setting prior to opening.
Expiry Date:	12 months

Images



ELISA

Image 1.