

Datasheet for ABIN6730852 **CXCL1 IQ-ELISA Kit**



[Go to Product page](#)

Overview

Quantity: 96 tests

Target: CXCL1

Reactivity: Rat

Method Type: DNA-Binding ELISA

Application: ELISA

Product Details

Purpose: Rat Immunoquantitative (PCR-Based) CINC-1 ELISA Kit for cell culture supernatants, plasma, and serum samples.

Sample Type: Cell Culture Supernatant, Plasma, Serum

Analytical Method: Quantitative

Detection Method: qPCR

Specificity: 30 pg/ml in Assay Diluent D and 50 pg/ml in Assay Diluent B (Anticipated minimum sensitivity. Assay may detect lower levels of antigen.)

Sensitivity: 30 pg/mL

Characteristics: The Immuno Quantitative Enzyme Linked ImumunoSorbent Assay (IQELISA™) is an innovative new assay that combines the specificity and ease of use of an ELISA with the sensitivity of real-time PCR. This results in an assay that is simultaneously familiar and cutting edge and enables the use of lower sample volumes while also providing more sensitivity. The Rat CINC-1 IQELISA™ Kit is a modified ELISA assay with high sensitivity qPCR readout for the quantitative measurement of Rat CINC-1 in serum, plasma, and cell culture supernatants. This assay

Product Details

employs an antibody specific for Rat CINC-1 coated on a 96-well PCR plate. Standards and samples are pipetted into the wells and CINC-1 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and a detection affinity molecule is added to the plates. After washing away unbound detection affinity molecule, primers and a PCR master mix are added to the wells and data is collected using qPCR. Ct values obtained from the qPCR are then used to calculate the amount of antigen contained in each sample, where lower Ct values indicate a higher concentration of antigen.

Components:

- CINC-1 Microplate (Item A): 96 well PCR plate coated with anti-Rat CINC-1
- Wash Buffer I Concentrate (20x) (Item B): 25 ml of 20x concentrated solution
- Standards (Item C): 2 vials of recombinant Rat CINC-1
- Assay Diluent A (Item D): 30 ml diluent buffer, 0.09% sodium azide as preservative. For Standard/Sample (serum/plasma) diluent
- Assay Diluent B (Item E): 15 ml of 5x concentrated buffer. For Standard/Sample (cell culture medium/urine) diluent
- Detection Affinity Reagent for CINC-1 (Item F): 2 vials of a 4x concentrated solution of anti-Rat CINC-1 affinity reagent
- IQELISA Detection Reagent (Item G): 1.4ml of a 10x concentrated stock
- Primer Solution (Item I): 1.7 ml vial
- PCR Master Mix (Item J): 1.2 ml vial
- PCR Preparation buffer (Item K): 1 ml vial of 10x concentrated buffer
- Final Wash Buffer (Item L): 10ml vial of 10x concentrated buffer

Material not included:

- Real-time PCR instrument, Bio-Rad recommended
- Precision pipettes to deliver 2 µL to 1 mL volumes
- Adjustable 1-25 mL pipettes for reagent preparation
- 100 mL and 1 liter graduated cylinders
- Absorbent paper
- Distilled or deionized water
- Log-log graph paper or computer and software for data analysis
- Tubes to prepare standard or sample dilutions
- Heating block or water bath capable of 80°C

Target Details

Target: CXCL1

Alternative Name: CINC-1 ([CXCL1 Products](#))

Gene ID: 81503

UniProt: [P14095](#)

Pathways: [Autophagy](#)

Application Details

Application Notes: The Immuno-Quantitative ELISA (IQELISA) kits are an innovative assay platform that combines the specificity and ease of use of an ELISA with the sensitivity of real-time PCR. This results in an assay that is simultaneously familiar and cutting edge and enables the use of only 1/10th the sample volume while also providing 10x more sensitivity than a traditional ELISA.

Comment: **Features:**

- Excellent for follow up/confirmation of antibody array data
- Pre-coated 96 well plate
- Strip plate format minimizes waste
- Complete kit includes all necessary reagents
- 10x more sensitive than ELISA
- Reproducible and reliable
- Optimized for serum, plasma, urine and cell culture medium
- 1/10th the sample volume of an ELISA

Research Applications:

- Detection of quantitative protein levels in biological fluids
 - Validation of antibody array results
 - Validation of biomarker discovery studies
-

Plate: Pre-coated

Protocol:

1. Prepare all reagents, samples and standards as instructed
2. Add 25 μ L standard or sample to each well. Incubate for 2.5 hours at room temperature or overnight at 4°C
3. Add 25 μ L detection affinity reagent to each well. Incubate 1 hour at room temperature
4. Add 25 μ L of IQELISA Detection Reagent to each well. Incubate 1 hour
5. Add 15 μ L Primer solution 10 μ L of PCR master mix to each well
6. Run real-time PCR

Restrictions: For Research Use only

Handling

Storage Comment: May be stored for up to 6 months at 2° to 8°C from the date of shipment. Standard (recombinant protein) should be stored at -20°C or -80°C (recommended at -80°C) after reconstitution. Opened PCR plate or reagents may be stored for up to 1 month at 2°C to 8°C.

Expiry Date: 6 months
