



Rat neutrophil gelatinase-associated lipocalin,NGAL ELISA Kit

Product Code	CSB-E09409r
Abbreviation	LCN2
Protein Biological Process 1	Apoptosis/Autophagy
Uniprot No.	P30152
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.3125 ng/ml- 20ng/ml
Sensitivity	0.078 ng/ml
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Immunology
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm. An incubator can provide stable incubation conditions up to 37°C±5°C. Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution
Gene Names	Lcn2
Tag Info	quantitative
Protein Description	Sandwich
Component	A micro ELISA plate --- The 96-well plate has been pre-coated with an anti-rat NGAL. This dismountable microplate can be divided into 12 x 8 strip plates. Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series,



read the OD values, and then draw a standard curve.

One vial Biotin-labeled NGAL antibody (100 x concentrate) (120 µl/bottle) ---Act as the detection antibody.

One vial HRP-avidin (100 x concentrate) (120 µl/bottle) ---Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic.

One vial Biotin-antibody Diluent (15 ml/bottle) ---Dilute the Biotin-antibody.

One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the HRP-avidin solution.

One vial Sample Diluent(50 ml/bottle)---Dilute the sample to an appropriate concentration.

One vial Wash Buffer (25 x concentrate) (20 ml/bottle) ---Wash away unbound or free substances.

One vial TMB Substrate (10 ml/bottle) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue.

One vial Stop Solution (10 ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow.

Four Adhesive Strips (For 96 wells) --- Cover the microplate when incubation.
An instruction manual

Description

The Rat neutrophil gelatinase-associated lipocalin (NGAL) ELISA Kit is used to quantitatively measure NGAL concentrations in rat serum, plasma, or tissue homogenates. It performs well in important characteristics, including sensitivity, specificity, precision, recovery, linearity, and lot-to-lot consistency. This assay is based on the sandwich ELISA mechanism and enzyme-substrate chromogenic reaction. The solution color develops proportionally to the amount of NGAL in the sample. And the intensity of the color can be measured at 450 nm via a microplate reader.

NGAL was originally isolated from secondary granules of human neutrophils as a 25 KDa protein covalently linked to matrix metalloproteinase-9 (MMP-9) in human neutrophils. It is highly induced in the kidney after ischemic or nephrotoxic acute kidney injury (AKI) in animal models. NGAL has been reported as an early urine and plasma biomarker of AKI in pediatric and adult cardiac surgery. Urinary NGAL has been employed as a routine measurement in AKI patients by King Chulalongkorn Memorial Hospital since 2015.

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