

Rat NBC4 (Electrogenic Sodium Bicarbonate Cotransporter 4) ELISA Kit | NBC4 elisa kit

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CATALOG #
AAA277238

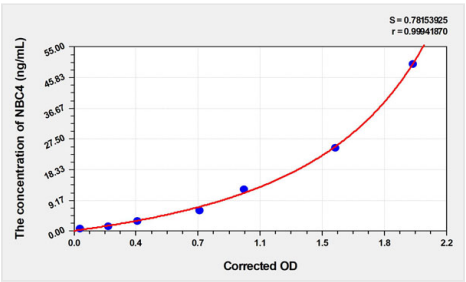
REACTIVITY
Rat

PRODUCT SYNONYMS

NBC4 (Electrogenic Sodium Bicarbonate Cotransporter 4); Rat NBC4 (Electrogenic Sodium Bicarbonate Cotransporter 4) ELISA Kit; SLC4A5; NBCe2; Solute Carrier Family 4 Member 5; Sodium Bicarbonate Cotransporter; NBC4 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Assay Type	Sandwich
Samples	Tissue homogenates and other biological fluids.
Detection Range	0.79-50ng/mL
Sensitivity	0.31ng/mL
Standard	50ng/mL
Assay Length	3.5h
Precision	Intra-assay Precision (Precision within an assay): CV%<8% Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision. Inter-assay Precision (Precision between assays): CV%<10% Three samples of known concentration were tested in forty separate assays to assess inter-assay precision.
Test Principle	The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Electrogenic Sodium Bicarbonate Cotransporter 4 (NBC4). Standards or samples are added to the appropriate microtiter plate wells then with a biotin-conjugated antibody specific to Electrogenic Sodium Bicarbonate Cotransporter 4 (NBC4). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain Electrogenic Sodium Bicarbonate Cotransporter 4 (NBC4), biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 10 nm. The concentration of Electrogenic Sodium Bicarbonate Cotransporter 4 (NBC4) in the samples is then determined by comparing the OD of the samples to the standard curve.
Standard Curve	Matrices listed below were spiked with certain level of recombinant NBC4 and the recovery rates were calculated by comparing the measured value to the expected amount of NBC4 in samples. Matrix Recovery range Average serum (n=5) 86-99% 92 EDTA plasma (n=5) 80-97% 88 Heparin plasma (n=5) 86-99% 92
Recovery Rate	The linearity of the kit was assayed by testing samples spiked with appropriate concentration of NBC4 and their serial dilutions. The results were demonstrated by the percentage of calculated concentration to the expected. Matrix 1:21:41:81:16 serum (n=5) 95-103% 95-103% 84-98% 93-102% EDTA plasma (n=5) 83-96% 97-105% 85-99% 79-93% Heparin plasma (n=5) 85-99% 79-93% 89-97% 89-97%



Standard Curve (Sample)

ADDITIONAL INFORMATION

Product Categories/Family for NBC4
elisa kit

Signal transduction

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/rat-elisa-kits/nbc4-electrogenic-sodium-bicarbonate-cotransporter-4/277238>