

Datasheet for ABIN5653701 **SLC11A2 ELISA Kit**



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Overview

Quantity: 96 tests

Target: SLC11A2

Reactivity: Human

Method Type: Sandwich ELISA

Detection Range: 0.156 ng/mL - 10 ng/mL

Minimum Detection Limit: 0.156 ng/mL

Application: ELISA

Product Details

Sample Type: Cell Lysate, Tissue Homogenate

Analytical Method: Quantitative

Detection Method: Colorimetric

Specificity: This assay has high sensitivity and excellent specificity for detection of Divalent Metal Transporter 1 (DMT1). No significant cross-reactivity or interference between Divalent Metal Transporter 1 (DMT1) and analogues was observed.

Sensitivity: 0.055 ng/mL

Target Details

Target: SLC11A2

Alternative Name: Divalent Metal Transporter 1 ([SLC11A2 Products](#))

Target Details

Background: Gene Name: Divalent Metal Transporter 1
Gene Aliases: SLC11A2, DCT1, NRAMP2, Natural resistance-associated macrophage protein 2, Solute Carrier Family 11 Member 2, Proton-Coupled Divalent Metal Ion Transporters

Pathways: [Transition Metal Ion Homeostasis](#), [Proton Transport](#), [Positive Regulation of Endopeptidase Activity](#)

Application Details

Comment: The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5 % within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.

Assay Time: 3 h

Plate: Pre-coated

Protocol: 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 Divalent Metal Transporter 1 (DMT1). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Divalent Metal Transporter 1 (DMT1). 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 Divalent Metal Transporter 1 (DMT1), 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 450nm ± 10nm. The concentration of Divalent Metal Transporter 1 (DMT1) in the samples is then determined by comparing the O.D. of the samples to the standard curve.

Assay Precision: Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level Divalent Metal Transporter 1 (DMT1) were tested 20 times on one plate, respectively
Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Divalent Metal Transporter 1 (DMT1) were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100
Intra-Assay: CV<10%
Inter-Assay: CV<12%

Restrictions: For Research Use only

Handling

Handling Advice:	The Stop Solution is acidic. Do not allow to contact skin or eyes. Calibrators, controls and specimen samples should be assayed in duplicate. Once the procedure has been started, all steps should be completed without interruption.
Storage:	4 °C,-20 °C
Storage Comment:	-20°C. Bring all reagents to room temperature before beginning test. The kit may be stored at 4°C for immediate use within two days upon arrival. Reseal any unused strips with desiccant pack. Minimize freeze/thaw cycles.
Expiry Date:	4-8 months