

# Rat Solute carrier family 12 member 4 (SLC12A4) ELISA Kit

Catalog No: #EK7310

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Package Size: #EK7310-1 48T #EK7310-2 96T

## Description

Product Name	Rat Solute carrier family 12 member 4 (SLC12A4) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat ( <i>Rattus norvegicus</i> )
Other Names	FLJ17069; FLJ40489; KCC1; K-Cl cotransporter erythroid K:Cl cotransporter potassium/chloride cotransporter 1 solute carrier family 12; member 4
Accession No.	Q28677
Uniprot	Q28677
GeneID	100009441;
Storage	<p>The stability of ELISA 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.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

## Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.127 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate SLC12A4 in samples. An antibody specific for SLC12A4 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySLC12A4 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC12A4 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of SLC12A4 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**The full-length sequence was obtained from EST clones and by RT-PCR of HEK293 cell RNA. The 1,085-amino acid KCC1 protein is 24 to 25% identical to NKCC1 and SLC12A3 and shares 97% identity with rabbit KCC1. The overall structure of KCC1 is similar to that of other cation-chloride cotransporters, with 12 predicted transmembrane regions, a large extracellular loop with potential N-linked glycosylation sites, and cytoplasmic N- and C-terminal domains. Northern blot analysis revealed that KCC1 is expressed ubiquitously. KCC1 exhibits the functional properties of the red cell K-Cl cotransporter, including stimulation by swelling and N-ethylmaleimide, and low affinities for rubidium, chloride, and bumetanide.

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Note: This product is for in vitro research use only