



Datasheet for ABIN863201

anti-SLC12A3 antibody (AA 74-95)



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7 Images

10 Publications

Overview

Quantity: 100 µg

Target: SLC12A3

Binding Specificity: AA 74-95

Reactivity: Rat

Host: Rabbit

Clonality: Polyclonal

Conjugate: This SLC12A3 antibody is un-conjugated

Application: Western Blotting (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC),
Immunofluorescence (IF), Immunoelectron Microscopy (IEM)

Product Details

Immunogen: Produced against a synthetic peptide mapping to a segment of rat NCC (amino acids 74-95), N-terminal

Specificity: Detects ~160 kDa.

Cross-Reactivity: Dog, Human, Mouse, Rat

Purification: Affinity Purified

Target Details

Target: SLC12A3

Alternative Name: NCC ([SLC12A3 Products](#))

Target Details

Background:	NCC, a thiazide-sensitive NaCl co-transporter, is found on the apical membrane of the distal convoluted tubule, where it is the principal mediator of Na ⁺ and Cl ⁻ reabsorption in this segment of the nephron. It is activated by phosphorylation, and has been implicated in renal NaCl and K ⁺ homeostasis (1). Regulation of NCC expression and phosphorylation by dietary NaCl restriction appears to involve SGK1(1). In experiments with angiotensin II-infused mice, increased sensitivity to Ang II may involve over-activity of NCC (2). Therefore, NCC is the target of thiazide diuretics used in the treatment of hypertension (1). Molecular experiments have also shown that NCC has been detected in the lens cortex, core and fiber cells of a rat (3).
Gene ID:	54300, 6559
NCBI Accession:	NP_062218 , NP_000330
UniProt:	P55018 , P55017

Application Details

Application Notes:	<ul style="list-style-type: none">WB (1:1000)IHC (1:200)optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN863201 was sufficient for detection of NCC3 in 10 µg of rat kidney tissue lysate by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	-20°C

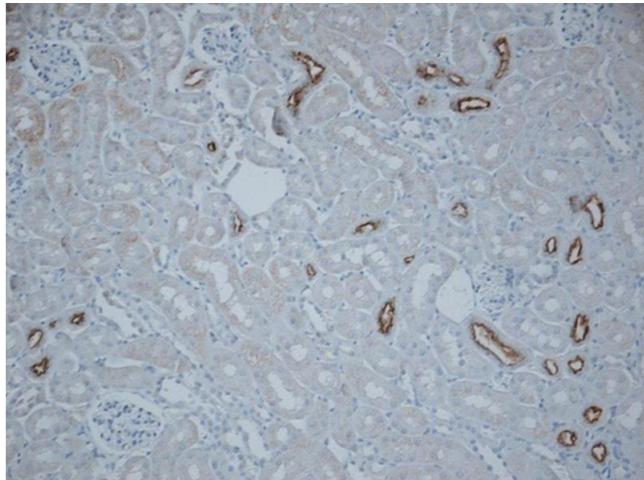
Publications

Product cited in:

Gatto, Amin, Deyoung, Hey, Mareci, Magin: "Ultra-High Field Diffusion MRI Reveals Early Axonal Pathology in Spinal Cord of ALS mice." in: **Translational neurodegeneration**, Vol. 7, pp. 20, (2018) ([PubMed](#)).

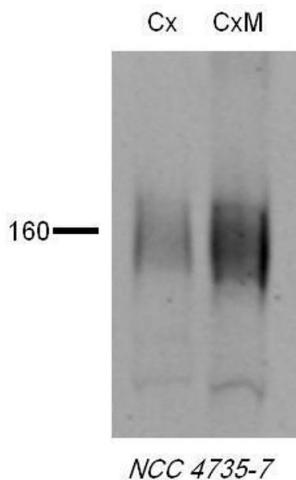
There are more publications referencing this product on: [Product page](#)

Images



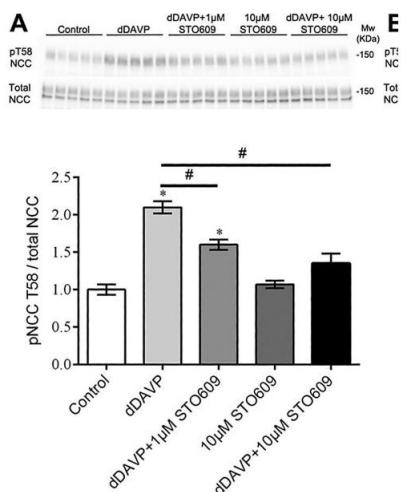
Immunohistochemistry

Image 1. Immunohistochemistry analysis using Rabbit Anti-NCC Polyclonal Antibody (ABIN863201). Tissue: kidney tissue. Species: Mouse. Fixation: paraformaldehyde-fixed paraffin-embedded. Primary Antibody: Rabbit Anti-NCC Polyclonal Antibody (ABIN863201) at 1:500 for Overnight at 4 °C . Secondary Antibody: Biotinylated Goat Anti-Rabbit IgG at 1:500 for 30 min at RT. Courtesy of: Brigitte Rogge.



Western Blotting

Image 2. NCC Western Blotting, rat tissue.



Western Blotting

Image 3. Ex vivo studies on isolated cortical tubules from mouse kidney highlight a role for CAMKK and PI3K in VP signaling in mpkDCT cells. Top panels are representative immunoblots and the bottom panels are summarized data. In all experiments, dDAVP (10-6M) treatment for 20 min significantly and consistently increased phosphorylation of NCC at thr-58 (surrogate marker of NCC activation). (A) Effects of the CAMKK inhibitor STO609 on baseline and dDAVP stimulated NCC phosphorylation. (B) Effects of the PI3K inhibitor LY294002 on baseline and dDAVP stimulated NCC phosphorylation. (C) Effects of the PKA inhibitor H89 on baseline and dDAVP stimulated NCC phosphorylation. *represents significant difference from control group, #indicates significant difference between groups as indicated. - figure provided by CiteAb. Source: PMID26239621

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN863201.