

For Research Use Only

# KCC2/SLC12A5-Specific Polyclonal antibody

Catalog Number: 19565-1-AP

6 Publications



## Basic Information

Catalog Number:

19565-1-AP

Size:

150ul, Concentration: 550 ug/ml by Nanodrop and 293 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM\_020708

GeneID (NCBI):

57468

UNIPROT ID:

Q9H2X9

Full Name:

solute carrier family 12 (potassium-chloride transporter), member 5

Calculated MW:

126 kDa

Observed MW:

130-150 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IHC 1:20-1:200

IF-P 1:50-1:500

## Applications

Tested Applications:

WB, IHC, IF-P, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

Positive Controls:

WB : human brain tissue, mouse brain tissue, rat brain tissue

IHC : human brain tissue, rat brain tissue, mouse brain tissue

IF-P : mouse cerebellum tissue,

## Background Information

KCC2, encoded by SLC12A5, is a neuron-specific K<sup>+</sup>-Cl<sup>-</sup> cotransporter that is essential for Cl<sup>-</sup> homeostasis and inhibitory synaptic transmission in brain. KCC2 is expressed at high levels in neurons throughout the nervous system. KCC2 deletion caused animal death. Alterations of KCC2 have been linked to neuropathic pain, temporal lobe epilepsy, and other diseases. This antibody can detect 130-150 kDa monomer and ~250 kDa dimer of KCC2 in brain lysate. (PMID: 23401525)

## Notable Publications

Author	Pubmed ID	Journal	Application
Aaron J Barbour	34445881	ASN Neuro	WB IF
Shuo Zhao	35106976	Brain Behav	WB
Aaron J Barbour	32344154	Neurobiol Dis	WB,IF

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

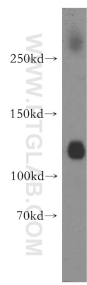
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

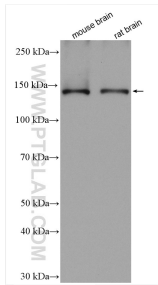
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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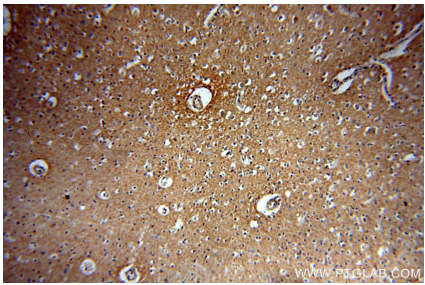
Selected Validation Data



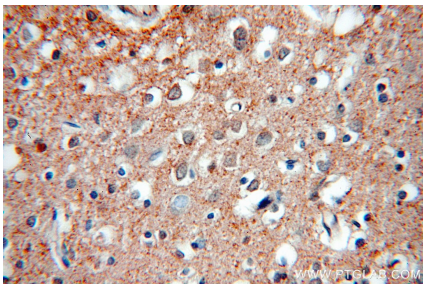
human brain tissue were subjected to SDS PAGE followed by western blot with 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



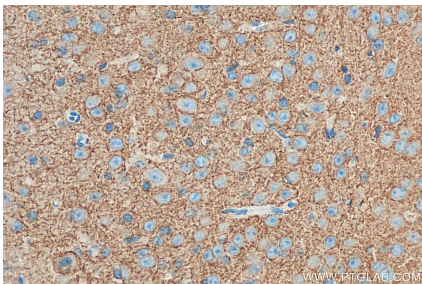
Various lysates were subjected to SDS PAGE followed by western blot with 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



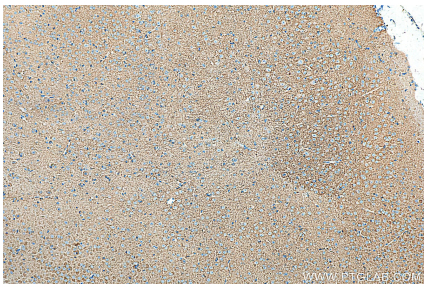
Immunohistochemical analysis of paraffin-embedded human brain using 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:100 (under 10x lens).



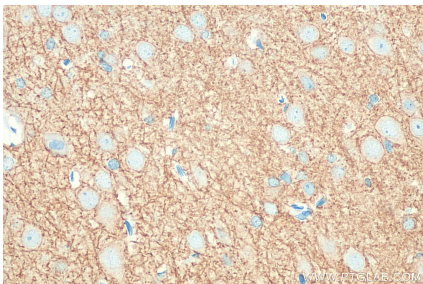
Immunohistochemical analysis of paraffin-embedded human brain using 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:100 (under 40x lens).



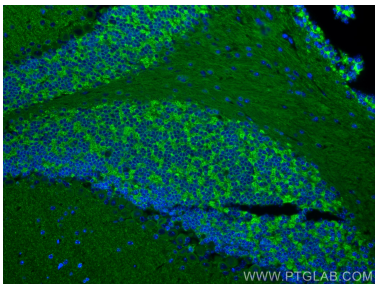
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



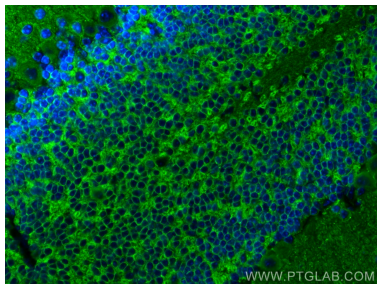
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using KCC2/SLC12A5-Specific antibody (19565-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using KCC2/SLC12A5-Specific antibody (19565-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).