

For Research Use Only

KCC2/SLC12A5-Specific Polyclonal antibody



Catalog Number: 19565-1-AP

5 Publications

Basic Information

Catalog Number: 19565-1-AP	GenBank Accession Number: NM_020708	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 550 µg/ml by Nanodrop and 293 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 57468	Recommended Dilutions: WB 1:500-1:2000 IHC 1:20-1:200 IF 1:50-1:500
Source: Rabbit	Full Name: solute carrier family 12 (potassium-chloride transporter), member 5	
Isotype: IgG	Calculated MW: 126 kDa	
	Observed MW: 130-150 kDa	

Applications

Tested Applications:

IF, IHC, WB, ELISA

Cited Applications:

IF, IHC, WB

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: mouse cerebellum tissue,

Background Information

KCC2, encoded by SLC12A5, is a neuron-specific K⁺-Cl⁻ cotransporter that is essential for Cl⁻ 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

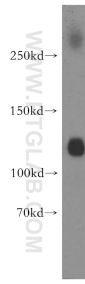
For technical support and original validation data for this product please contact:

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

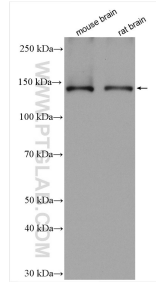
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

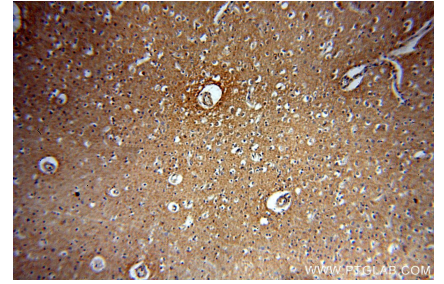
Selected Validation Data



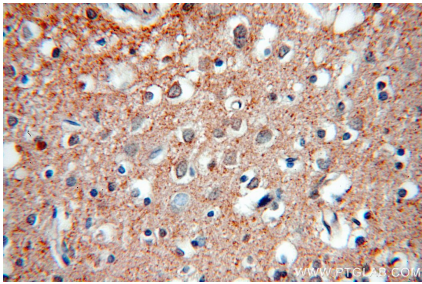
human brain tissue were subjected to SDS PAGE followed by western blot with 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



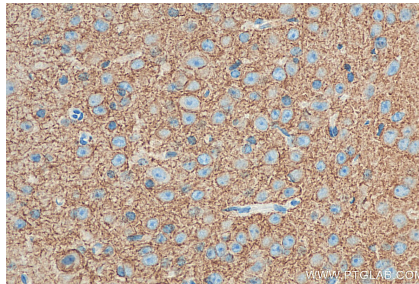
Various lysates were subjected to SDS PAGE followed by western blot with 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



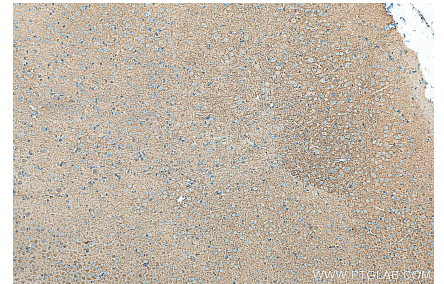
Immunohistochemical analysis of paraffin-embedded human brain using 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:100 (under 10x lens).



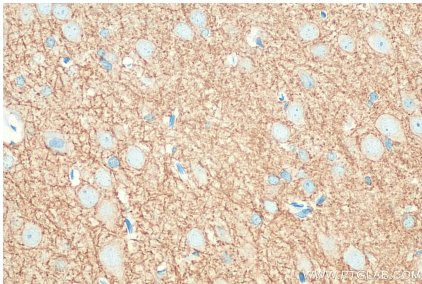
Immunohistochemical analysis of paraffin-embedded human brain using 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:100 (under 40x lens).



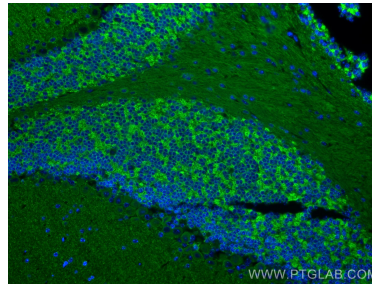
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



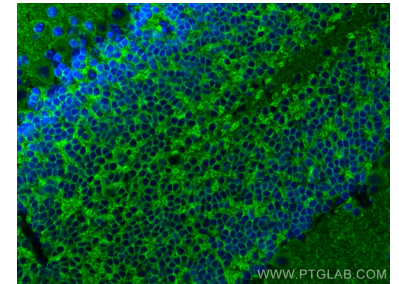
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19565-1-AP (KCC2/SLC12A5-Specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).