

## K<sup>+</sup>/Cl<sup>-</sup> Cotransporter (KCC2) Monoclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 11564 (clone S1-12)  
**Size:** 100ug (1mg/ml) in PBS, pH 7.4, 50% glycerol, 0.09% sodium azide. Purified by Protein G affinity chromatography.

### BACKGROUND

KCC2 is a member of the cation-chloride cotransporter gene family. KCCs lower intracellular chloride concentrations below the electrochemical equilibrium potential. Depending on the concentration gradients of potassium and chloride, KCC2 can operate as a net efflux or influx pathway. KCC2 is expressed at high levels in neurons throughout the nervous system and is localized at inhibitory synapses of the spinal cord. Studies in mice have shown that KCC2 reduces GABA's inhibitory signaling resulting in motor defects, epilepsy, and anxiety-like behavior.

### SPECIFICATION SUMMARY

**Antigen:** Fusion protein consisting of aa 932-1043 of rat KCC2 (accession no. NP\_599190).

**Host Species:** Mouse

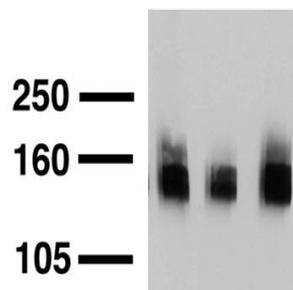
**Antibody Class:** IgG2a

### SPECIFICITY

This antibody recognizes human, mouse and rat KCC2.

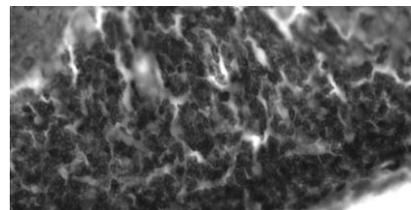
### APPLICATIONS

**Immunoblotting:** use at 3ug/ml. A band of ~140kDa is detected.



Western blot analysis of KCC2 in adult rat brain.

**Immunohistochemistry:** use at 1-5ug/ml.



Adult rat cerebellum with #11564 at 3ug/ml.

**Positive control:** Adult rat brain  
These are recommended concentrations; enduser should determine optimal concentrations for their applications.

### DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

### STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid repeated freeze-thaw cycles.

*For in vitro investigational use only. Not intended for diagnostic or therapeutic applications.*