

Anti-Sodium/hydrogen exchanger 2 SLC9A2 Antibody

Catalog Number: PA2219

About SLC9A2

Sodium-hydrogen exchanger 2, also called SLC9A2 or NHE2 is a protein that in humans is encoded by the SLC9A2 gene. This gene is mapped to 2q12.1. The Na⁺/H⁺ exchangers (NHE) are membrane proteins involved in cell volume. The exchanger (which they called NHE2) is found in several tissues, including intestine and kidney, and is highly expressed in villus and distal convoluted tubules. This gene is involved in pH regulation to eliminate acids generated by active metabolism or to counter adverse environmental conditions. It seems to play an important role in colonic sodium absorption.

Overview

Product Name	Anti-Sodium/hydrogen exchanger 2 SLC9A2 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Sodium/hydrogen exchanger 2 SLC9A2 Antibody catalog # PA2219. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9UBY0

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SLC9A2, different from the related rat and mouse sequences by two amino acids.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, By Heat

Anti-Sodium/hydrogen exchanger 2 SLC9A2 Antibody (PA2219) Images

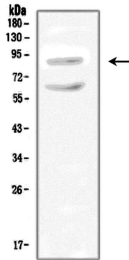


Figure 1. Western blot analysis of SLC9A2 using anti-SLC9A2 antibody (PA2219).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: rat kidney tissue lysate.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SLC9A2 antigen affinity purified polyclonal antibody (Catalog # PA2219) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for SLC9A2 at approximately 91KD. The expected band size for SLC9A2 is at 91KD.

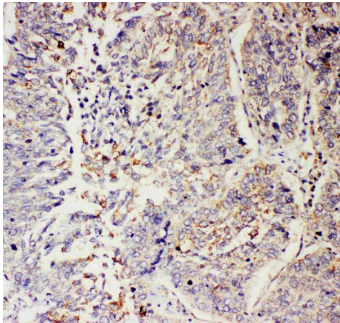


Figure 2. IHC analysis of SLC9A2 using anti-SLC9A2 antibody (PA2219).

SLC9A2 was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SLC9A2 Antibody (PA2219) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

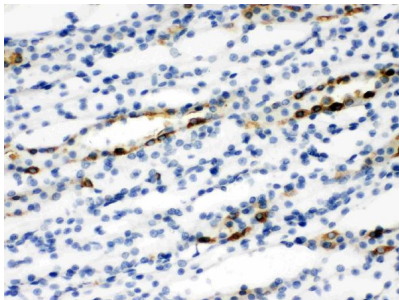
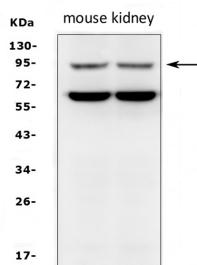


Figure 3. IHC analysis of SLC9A2 using anti-SLC9A2 antibody (PA2219).

SLC9A2 was detected in paraffin-embedded section of rat kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SLC9A2 Antibody (PA2219) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Figure 4. Western blot analysis of SLC9A2 using anti-SLC9A2 antibody (PA2219).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample



under reducing conditions.

Lane 1: mouse kidney tissue lysates,

Lane 2: mouse kidney tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SLC9A2 antigen affinity purified polyclonal antibody (Catalog # PA2219) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for SLC9A2 at approximately 91KD. The expected band size for SLC9A2 is at 91KD.

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