

# Rabbit Anti-Sodium hydrogen exchanger 1 antibody

SL0505R

**Product Name** Sodium hydrogen exchanger 1

**Chinese Name** 钠氢 Channel protein 抗体

**Alias** amiloride-sensitive; APNH; APNH1; FLJ42224; Na Li countertransporter; Na(+)/H(+) antiporter; Na(+)/H(+) exchanger 1; Na<sup>+</sup> H<sup>+</sup> antiporter amiloride-sensitive; Na<sup>+</sup> H<sup>+</sup> antiporter; Na<sup>+</sup> H<sup>+</sup> exchanger 1; NHE-1; NHE1; OTTHUMP00000004468; SL9A1\_HUMAN; SLC9A1; Sodium hydrogen exchanger 1; Sodium/hydrogen exchanger 1; solute carrier family 9; Solute carrier family 9 member 1; Solute carrier family 9 sodium hydrogen exchanger isoform 1 antiporter Na<sup>+</sup> H<sup>+</sup> amiloride sensitive; Solute carrier family 9 subfamily A (NHE1 cation proton antiporter 1) member 1; Solute carrier family 9 subfamily A member 1.

**Research Area** Cardiovascular Cell biology Signal transduction Channel protein Transporter

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Human,Mouse,Rat(predicted:Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep)  
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)

**Applications** not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 91kDa

**Cellular localization** The cell membrane

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human NHE1: 470-550/815  
<Extracellular>

**Lsotype** IgG



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<b>Purification</b>	affinity purified by Protein A
<b>Buffer Solution</b>	Human,Mouse,Rat(predicted:Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep)1M TBS(pH7.4) with 1% BSA, Human,Mouse,Rat(predicted:Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep)3% Proclin300 and 50% Glycerol.
<b>Storage</b>	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
<b>Attention</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>PubMed</b>	<a href="#">PubMed</a> This gene encodes a Na <sup>+</sup> /H <sup>+</sup> antiporter that is a member of the solute carrier family 9. The encoded protein is a plasma membrane transporter that is expressed in the kidney and intestine. This protein plays a central role in regulating pH homeostasis, cell migration and cell volume. This protein may also be involved in tumor growth. [provided by RefSeq, Sep 2011]
<b>Product Detail</b>	<b>Function:</b> Involved in pH regulation to eliminate acids generated by active metabolism or to counter adverse environmental conditions. Major proton extruding system driven by the inward sodium ion chemical gradient. Plays an important role in signal transduction.
	<b>Subunit:</b> Oligomer. Interacts with calmodulin and TESC. Interacts (via the juxtamembrane region of the cytoplasmic C-terminus domain) with CHP1; the interaction occurs at the plasma membrane in a calcium-dependent manner. Interacts with CHP2; the interaction occurs in a calcium-dependent manner.
	<b>Subcellular Location:</b> Membrane; Multi-pass membrane protein.
	<b>Tissue Specificity:</b> Kidney and intestine.
	<b>Post-translational modifications:</b> O-glycosylated. Ubiquitinated, leading to its degradation by the proteasome. Ubiquitination is reduced by CHP1.
	<b>Similarity:</b> Belongs to the monovalent cation:proton antiporter 1 (CPA1) transporter (TC 2.A.36) family.
<b>SWISS:</b>	

P19634

**Gene ID:**  
6548

**Database links:**

[Entrez Gene: 6548](#) Human

[Entrez Gene: 20544](#) Mouse

[Entrez Gene: 24782](#) Rat

[Omim: 107310](#) Human

[SwissProt: P19634](#) Human

[SwissProt: Q61165](#) Mouse

[SwissProt: P26431](#) Rat

[Unigene: 469116](#) Human

[Unigene: 4312](#) Mouse

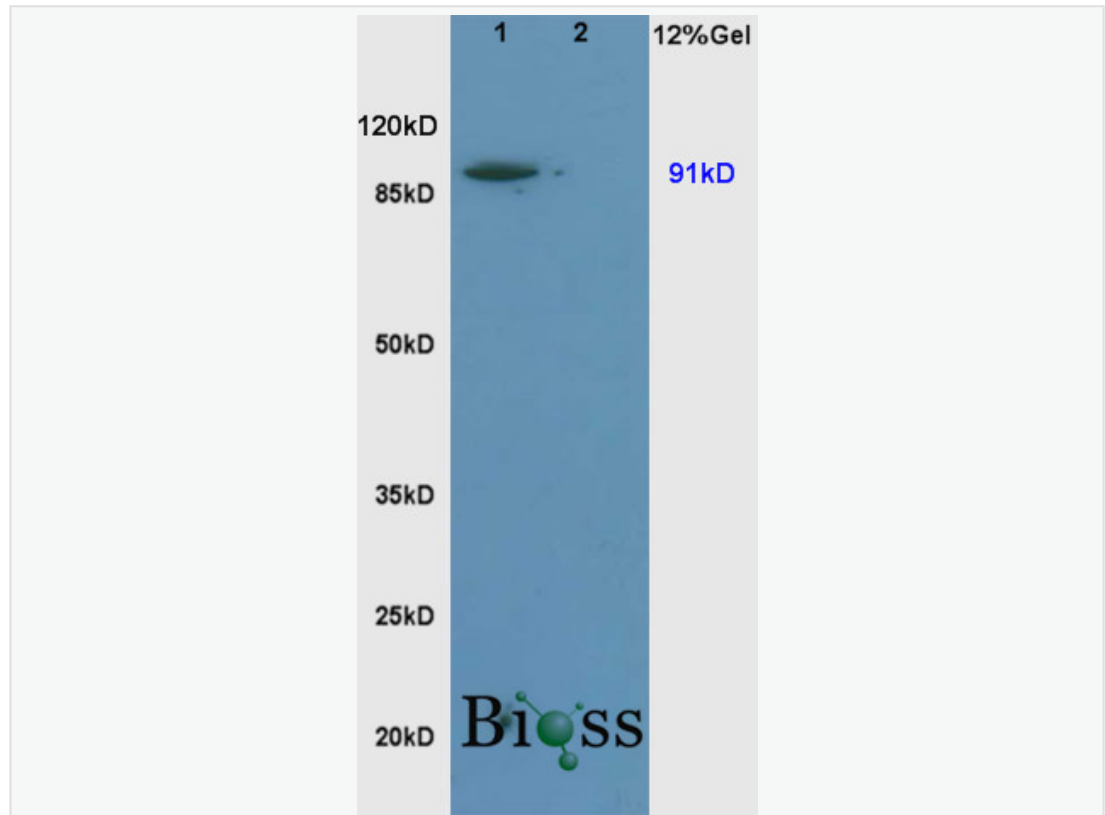
[Unigene: 5025](#) Rat

**Channel protein (Channel Protein)**

钠-氢 Exchange protein (NHE:  $\text{Na}^+/\text{H}^+$  Exchanger) 是维持细胞内环境的主要 The cell membrane 蛋白质之一，它的一个主要功能是调节细胞内 pH 值，使之保持在生理范围之内。细胞内 pH 值的变化，直接或间接的影响细胞的生长分裂、增殖和分化，也影响细胞的死亡。

钠-氢 Exchange protein 质的活性还影响细胞的移动和 Tumour 细胞的转移。目前主要方向是：研究消化道 Tumour 细胞转移。

**Product  
Picture**



Sample:

Brain(Rat) lysate at 30ug;

Liver(Rat) lysate at 30ug;

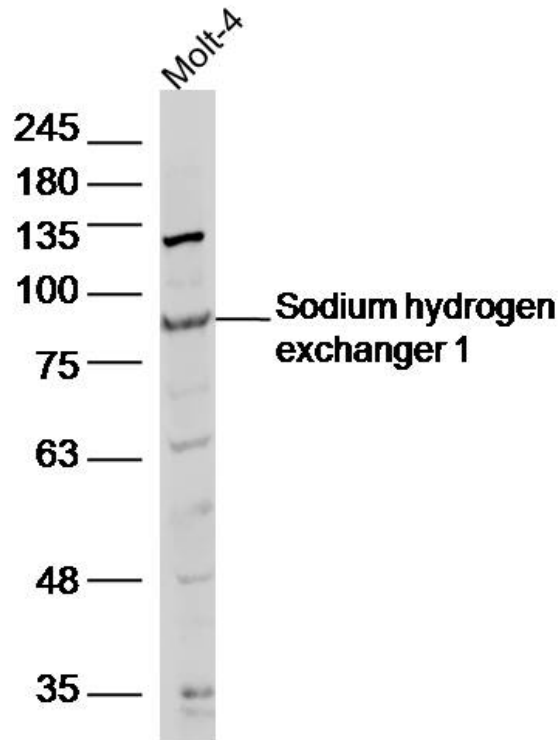
Primary: Anti-NHE1 (SL0505R) at 1:200 dilution;

Secondary: HRP conjugated Goat-Anti-Rabbit IgG(bse-0295G) at 1: 3000  
dilution;

Predicted band size : 91kD

Observed band size : 91kD

We are unsure as to the identity of these extra bands



Sample:

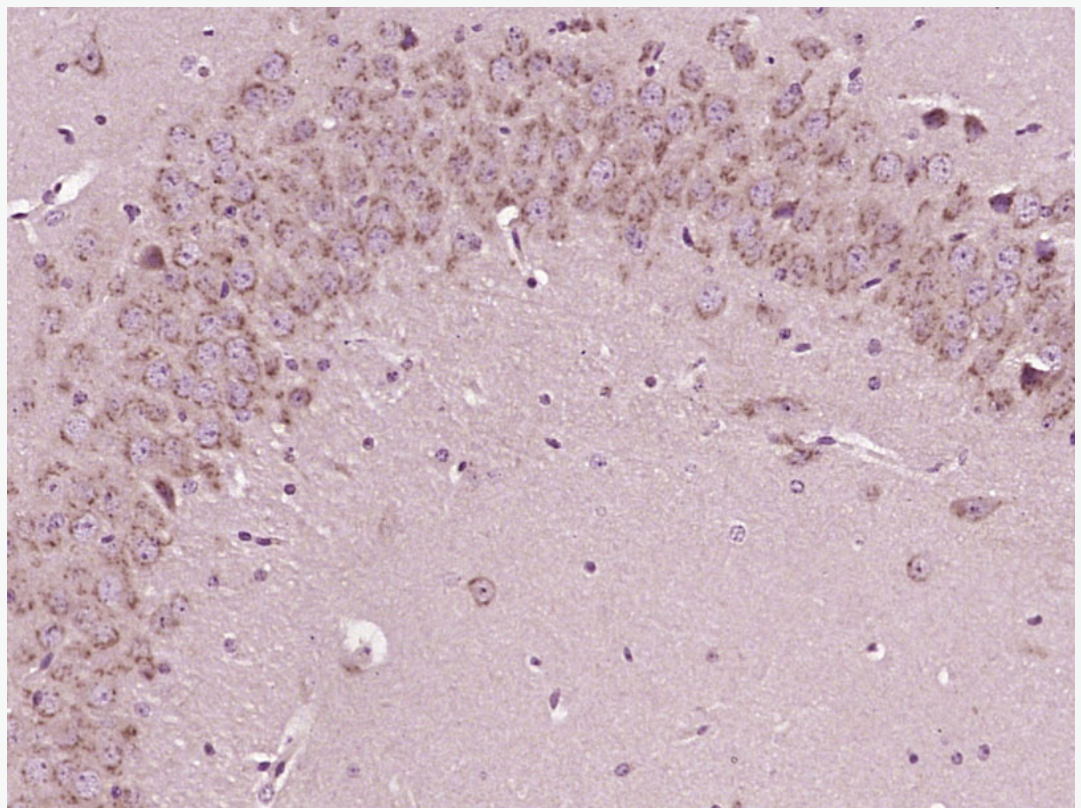
molt-4(human)cell Lysate at 40 ug

Primary: Anti- Sodium hydrogen exchanger 1 (SL0505R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 91kD

Observed band size: 91 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Sodium hydrogen exchanger 1) Polyclonal Antibody, Unconjugated (SL0505R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.