

# Anti-Sodium hydrogen exchanger 1 Antibody

## ER1916-95



<b>Product Type:</b>	Rabbit polyclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human, Mouse, Rat
<b>Applications:</b>	WB, IHC-P, IF-Tissue
<b>Molecular Wt:</b>	91 KDa

**Description:** The sodium-hydrogen antiporter 1 (NHE-1) also known as sodium/hydrogen exchanger 1 or SLC9A1 (SoLute Carrier family 9A1) is an isoform of sodium-hydrogen antiporter that in humans is encoded by the SLC9A1 gene. The Na<sup>+</sup>/H<sup>+</sup> antiporter (SLC9A1) is a ubiquitous membrane-bound enzyme involved in volume- and pH-regulation of vertebrate cells. It is inhibited by the non-specific diuretic drug amiloride and activated by a variety of signals including growth factors, mitogens, neurotransmitters, tumor promoters, and others. Sodium-hydrogen antiporter 1 has been shown to interact with carbonic anhydrase II and CHP. It is also the target of the experimental drug rimeporide, which is being developed for the treatment of Duchenne muscular dystrophy.

**Immunogen:** KLH conjugated synthetic peptide derived from human NHE1 470-550/815

**Positive control:** Kidney and intestine.

**Subcellular location:** Membrane; Multi-pass membrane protein.

**Database links:** SwissProt: P19634 Human

**Recommended Dilutions:**

<b>WB</b>	1:500-2000
<b>IHC-P</b>	1:100-500
<b>IF-tissue</b>	1:100-500

**Storage Buffer:** 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

**Storage Instruction:** Store at -20°C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4°C.

**Purity:** Protein A affinity purified.

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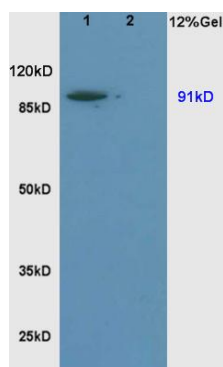
Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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## Images

**Fig1: Sample:**

Brain(Rat) lysate at 30ug;

Liver(Rat) lysate at 30ug;

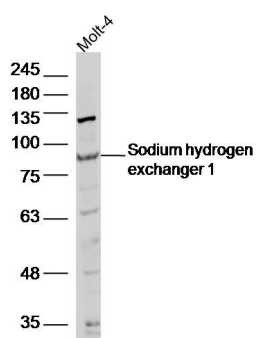
Primary: Anti-NHE1 (ER1916-95) at 1:200 dilution;

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

**Fig2: Sample:**

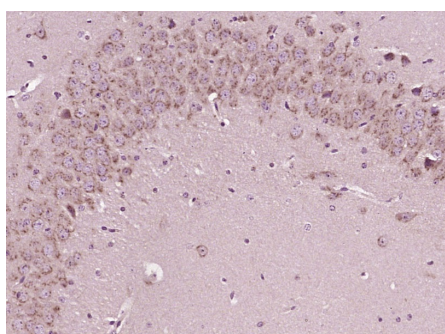
molt-4(human)cell Lysate at 40 ug

Primary: Anti- Sodium hydrogen exchanger 1 (ER1916-95) at 1/300 dilution

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

Predicted band size: 91kD

Observed band size: 91 kD



**Fig3:** 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 (ER1916-95) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## Background References

1. Proc. Natl et al. A calcineurin homologous protein inhibits GTPase-stimulated Na-H exchange. Proc. Natl. Acad. Sci. U.S.A. 93:12631-12636(1996)
2. Pang T. et al. Role of calcineurin B homologous protein in pH regulation by the Na<sup>+</sup>/H<sup>+</sup> exchanger 1: tightly bound Ca<sup>2+</sup> ions as important structural elements. Biochemistry 43:3628-3636(2004)

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