

**Anti-NaBC1 Antibody**  
**Rabbit polyclonal antibody to NaBC1**  
**Catalog # AP59880****Specification**

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**Anti-NaBC1 Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">Q8NBS3</a> |
| Other Accession   | <a href="#">A2AJN7</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Calculated MW     | 98181                  |

**Anti-NaBC1 Antibody - Additional Information****Gene ID** 83959**Other Names**

BTR1; Sodium bicarbonate transporter-like protein 11; Bicarbonate transporter-related protein 1; Sodium borate cotransporter 1; NaBC1; Solute carrier family 4 member 11

**Target/Specificity**

Recognizes endogenous levels of NaBC1 protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-NaBC1 Antibody - Protein Information****Name** SLC4A11**Synonyms** BTR1**Function**

Multifunctional transporter with an impact in cell morphology and differentiation. In the presence of borate B(OH)<sub>4</sub>(-), acts as a voltage-dependent electrogenic Na(+)-coupled B(OH)<sub>4</sub>(-) cotransporter controlling boron homeostasis (PubMed:<a href="http://www.uniprot.org/citations/15525507" target="\_blank">15525507</a>). At early stages of stem cell differentiation, participates in synergy with ITGA5-ITGB1 and ITGAV-ITGB3 integrins and BMPR1A to promote cell adhesion and contractility that drives differentiation toward

osteogenic commitment while inhibiting adipogenesis (By similarity). In the absence of  $B(OH)_4^-$ , acts as a  $Na^+$ -coupled  $OH^-$  or  $H^+$  permeable channel with implications in cellular redox balance (PubMed: [15525507](http://www.uniprot.org/citations/15525507) target="\_blank">15525507</a>, PubMed: [28642546](http://www.uniprot.org/citations/28642546) target="\_blank">28642546</a>). Regulates the oxidative stress response in corneal endothelium by enhancing antioxidant defenses and protecting cells from reactive oxygen species (PubMed: [28642546](http://www.uniprot.org/citations/28642546) target="\_blank">28642546</a>). In response to hypo-osmotic challenge, also acts as a water permeable channel at the basolateral cell membrane of corneal endothelial cells and facilitates transendothelial fluid reabsorption in the aqueous humor (PubMed: [31273259](http://www.uniprot.org/citations/31273259) target="\_blank">31273259</a>, PubMed: [25007886](http://www.uniprot.org/citations/25007886) target="\_blank">25007886</a>, PubMed: [23813972](http://www.uniprot.org/citations/23813972) target="\_blank">23813972</a>). In the presence of ammonia, acts as an electrogenic  $NH_3/H^+$  cotransporter and may play a role in ammonia transport and reabsorption in renal Henle's loop epithelium (PubMed: [27581649](http://www.uniprot.org/citations/27581649) target="\_blank">27581649</a>).

### Cellular Location

Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein

### Tissue Location

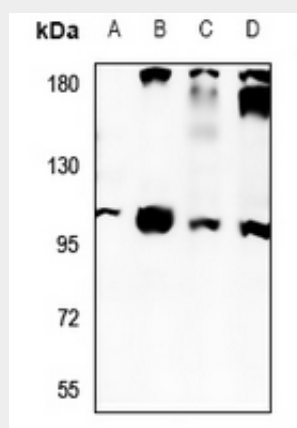
Widely expressed. Highly expressed in kidney, testis, salivary gland, thyroid, trachea and corneal endothelium. Not detected in retina and lymphocytes. [Isoform 5]: The predominant isoform in corneal endothelium (at protein level).

## Anti-NaBC1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-NaBC1 Antibody - Images



Western blot analysis of NaBC1 expression in mouse testis (A), PC12 (B), A549 (C), LO2 (D) whole cell lysates.

**Anti-NaBC1 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NaBC1. The exact sequence is proprietary.