

## Product Information

### Anti-SLC9A1

produced in rabbit, affinity isolated antibody

Product Number **SAB4200016**

### Product Description

Anti-SLC9A1 is produced in rabbit using as the immunogen a synthetic peptide corresponding to a fragment of human SLC9A1 (GeneID: 6548), conjugated to KLH. The corresponding sequence differs by 1 amino acid in mouse and rat SLC9A1. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-SLC9A1 recognizes human SLC9A1. The antibody can be used in several immunochemical techniques including immunoblotting (~95 kDa). Detection of the SLC9A1 band by immunoblotting is specifically inhibited by the immunizing peptide.

The Na<sup>+</sup>/H<sup>+</sup> antiporter NHE-1/SLC9A1 is a member of the conserved gene family of Na<sup>+</sup>/H<sup>+</sup> exchangers (NHE) that catalyze the electroneutral exchange of extracellular sodium for intracellular protons. It is a ubiquitous membrane-bound enzyme involved in pH and cell volume regulation of vertebrate cells.

NHEs are composed of an N-terminal transmembrane domain that contains 12 predicted membrane-spanning segments responsible for cation permeation, and a C-terminal cytosolic domain that interacts with signaling proteins to regulate transport activity. It is specifically inhibited by the diuretic drug amiloride and activated by a variety of signals including growth factors, mitogens, neurotransmitters, tumor promoters, and cell shrinkage.<sup>1-4</sup>

### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

### Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage/Stability

Store at -20 °C. For continuous use, the product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

### Product Profile

Immunoblotting: a working antibody concentration of 2.5-5.0 µg/mL is recommended using a whole extract of human platelets.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

### References

1. Mattei, M.G. et al., *Cytogenet. Cell Genet.*, **48**, 6-8 (1988).
2. Shrode, L.D. et al., *Am. J. Physiol.*, **275**, C431-C439 (1998).
3. Lacroix, J. et al., *EMBO Rep.*, **5**, 91-96 (2004).
4. Zaun, H.C. et al., *J. Biol. Chem.*, **283**, 12456-12467 (2008).

VS,ST,TD.KAA,PHC,MAM 05/19-1