

# Product Information

## MemDX™ Membrane Protein Bacterial nhaA (Na<sup>+</sup>):H<sup>+</sup>) antiporter NhaA)

Cat. No.: **MP0026F**

This product is for research use only and is not intended for diagnostic use.

The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

### Product Specifications

#### Host Species

Bacterial

#### Target Protein

nhaA

#### Protein Length

Full Length

#### Protein Class

Transporter

#### Molecular Weight

42 kDa

#### TMD

12

#### Sequence

MKHLHRFFSSDASGGIILIAAILAMIMANS GATSGWYHDFLETPVQLRVGSLEINKNML  
LWINDALMAVFFLLVGLEVKRELMQGS LASLRQA AFPVIAAIGGMIVPALLYLAFNYADP  
ITREGWAIPAATDIAFALGVLALLGSRVPLALKIFLMALAIIDDLGAIILALFYTNDLS  
MASLGVA AVAIAVLAVLNLCGARRTG VYILVG VVLWTAVLKSGVHATLAGVIVGFFIPLK  
EKHGRSPAKRLEHVLHPWVAYLILPLFAFANAGVSLQGVTL DGLTSILPLGIIAGLLIGK  
PLGISLFCWLALRLKLAHLPEGTTYQQIMVVGILCGIGFTMSIFIASLAFGSVDPELINW  
AKLGILVGSISSAVIGYSWLRVRLRPSV

### Product Description

#### Activity

Yes

#### Application

Screening & display technologies

#### Expression Systems

Cell-free expression system

**Tag**

Histidine tag fused to the N-terminal end of the protein

**Protein Format**

Proteoliposome

**Form**

Powder

**Purification**

Sucrose gradient

**Purity**

>40% by SDS-Page and Coomassie Blue staining

**Buffer**

Tris 50mM, pH 7.5

**Storage**

Store at +4°C for up to one week or several months at -80°C

**Target****Target Protein**

nhaA

**Full Name**

Na(+):H(+) antiporter NhaA

**Introduction**

nhaA P2 promoter is RpoS-regulated, but H-NS, Na(+)- and NhaR-independent. [More information is available at EcoGene: EG10652]. NhaA is a sodium ion/proton antiporter that uses the proton electrochemical gradient to expel sodium ions from the cytoplasm and functions primarily in the adaptation to high salinity at alkaline pH.

**Alternative Names**

ant, antA, ECK0020, hyc

**Gene ID**

[944758](#)

**UniProt ID**

[P13738](#)