



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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## Datasheet

### SLC4A1 (Human) Recombinant Protein

**Catalog Number:** H00006521-G01

**Regulation Status:** For research use only (RUO)

**Product Description:** Human SLC4A1 full-length ORF (AAH99628.1) recombinant protein without tag.

**Sequence:**

MEELQDDYEDMMEENLEQEEYEDPDIHESQMEEPAA  
HDTEATATDYHTTSHPGTHKVVYVELQELVMDEKNQEL  
RWMEARWVQLEENLGENGAWGRPHLSHLTFWSLL  
ELRRVFTKGTVLLDLQETSLAGVANQLLDRFIFEDQIRP  
QDREELLRALLLKSHAGELEALGGVPAVLTRSGDP  
SQPLLPQHSSLETQLFCEQDGGTEGHSPSGILEKIPP  
DSEATLVLVGRADFLEQPVLGFVRLQEAAELEAVELPV  
PIRFLFVLLGPEAPHIDYQLGRAAATLMSERVFRIDAY  
MAQSRGELLHSLEGLDCSLVLPPTDAPSEQALLSLVP  
VQRELLRRRYQSSPAKPDSSFYKGLDLNCGPDDPLQ  
QTGQLFGGLVDRIRRRYPYLSDITDAFSPQVLAIVFI  
YFAALSPAITFGGLGKTRNQMGVSELLISTAVQGILF  
ALLGAQPLLVVGFSGPLLVFEEAFFSFCETNGLEYIVG  
RVWIGFWLILLVVLVAFEGSFLVRFISRYTQEIFSFLIS  
LIFIYETFSKLIKIFQDHPLQKTYNYNVLMPKQGPLPN  
TALLSLVLMAGTFFFAMMLRKFKNSSYFPGKLRVIGD  
FGVPISILIMVLVDFFIQDITYTQKLSVPDGFKVSNSAR  
GWVIHPLGLRSEFPIWMMFASALPALLVFILIFLESQITT  
LIVSKPERKMKVKGSGFHLDLLLVGMGGVAALFGMPW  
LSATTVRSVTHANALVMGKASTPGAAAQIQEVKEQRI  
SGLLVAVLVGLSILMEPILSRIPLAVLFGIFLYMGVTSLS  
GIQLFDRILLFKPKYHPDVPYVYKRVKTRWMLHFTGI  
QIICLAVLWVVKSTPASLALPFVLILTVP LRRVLLPLIFRN  
VELQCLDADDAKATFDEEEGRDEYDEVAMPV

**Host:** Wheat Germ (in vitro)

**Theoretical MW (kDa):** 101.8

**Applications:** AP

(See our web site product page for detailed applications information)

**Protocols:** See our web site at

<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Form:** Liquid

**Preparation Method:** [in vitro wheat germ expression system with proprietary liposome technology](#)

**Purification:** None

**Recommend Usage:** Heating may cause protein aggregation. Please do not heat this product before electrophoresis.

**Storage Buffer:** 25 mM Tris-HCl of pH8.0 containing 2% glycerol.

**Storage Instruction:** Store at -80°C. Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 6521

**Gene Symbol:** SLC4A1

**Gene Alias:** AE1, BND3, CD233, DI, EMPB3, EPB3, FR, MGC116750, MGC116753, MGC126619, MGC126623, RTA1A, SW, WD, WD1, WR

**Gene Summary:** The protein encoded by this gene is part of the anion exchanger (AE) family and is expressed in the erythrocyte plasma membrane, where it functions as a chloride/bicarbonate exchanger involved in carbon dioxide transport from tissues to lungs. The protein comprises two domains that are structurally and functionally distinct. The N-terminal 40kDa domain is located in the cytoplasm and acts as an attachment site for the red cell skeleton by binding ankyrin. The glycosylated C-terminal membrane-associated domain contains 12-14 membrane spanning segments and carries out the stilbene disulphonate-sensitive exchange transport of anions. The cytoplasmic tail at the extreme C-terminus of the membrane domain binds carbonic anhydrase II. The encoded protein associates with the red cell membrane protein glycophorin A and this association promotes the correct folding and translocation of the exchanger. This protein is predominantly dimeric but forms tetramers in the presence of ankyrin. Many mutations in this gene are known in man, and these mutations can lead to two types of disease: destabilization of red cell membrane leading to hereditary spherocytosis, and defective kidney acid secretion leading to distal renal tubular acidosis. Other mutations that do not give rise to disease result in novel blood group antigens, which form the Diego blood

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group system. Southeast Asian ovalocytosis (SAO, Melanesian ovalocytosis) results from the heterozygous presence of a deletion in the encoded protein and is common in areas where *Plasmodium falciparum* malaria is endemic. One null mutation in this gene is known, resulting in very severe anemia and nephrocalcinosis. [provided by RefSeq]