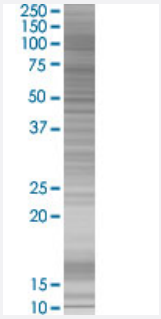
# SLC4A1 293T Cell Transient Overexpression Lysate(Denatured)

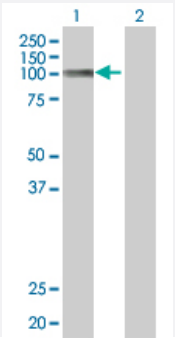
Catalog # H00006521-T01 Size 100 uL

## Applications




### SDS-PAGE Gel

SLC4A1 transfected lysate.




### Western Blot

Lane 1: SLC4A1 transfected lysate ( 101.8 KDa)
Lane 2: Non-transfected lysate.

## Specification

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| **Transfected Cell Line** | 293T |
| **Plasmid** | pCMV-SLC4A1 full-length |
| **Host** | Human |
| **Theoretical MW (kDa)** | 101.8 |
| **Quality Control Testing** | Transient overexpression cell lysate was tested with Anti-SLC4A1 antibody (H00006521-B01) by W estern Blots.<br>SDS-PAGE Gel<br>SLC4A1 transfected lysate.<br>Western Blot<br>Lane 1: SLC4A1 transfected lysate ( 101.8 KDa)<br>Lane 2: Non-transfected lysate. |

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| **Storage Buffer** | 1X Sample Buffer (50 mM Tris-HCl, 2% SDS, 10% glycerol, 300 mM 2-mercaptoethanol, 0.01% Bromophenol blue) |
| **Storage Instruction** | Store at -80°C. Aliquot to avoid repeated freezing and thawing. |

## Applications

- Western Blot

## Gene Info — SLC4A1

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| **Entrez GeneID** | 6521 |
| **GeneBank Accession#** | BC099628.3 |
| **Protein Accession#** | - |
| **Gene Name** | SLC4A1 |
| **Gene Alias** | AE1, BND3, CD233, DI, EMPB3, EPB3, FR, MGC116750, MGC116753, MGC126619, MGC126623, RTA1A, SW, WD, WD1, WR |
| **Gene Description** | solute carrier family 4, anion exchanger, member 1 (erythrocyte membrane protein band 3, Diego blood group) |
| **Omim ID** | 109270 110500 112010 112050 601550 601551 602722 |
| **Gene Ontology** | Hyperlink |
| **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 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 |

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| **Other Designations** | Froese blood group\|Swann blood group\|Waldner blood group\|Wright blood group\|anion exchange protein 1\|anion exchanger 1\|erythrocyte membrane protein band 3\|erythroid anion exchange protein\|solute carrier family 4, anion exchanger, member 1 |

## Disease

- Anemia
- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Elliptocytosis
- Genetic Predisposition to Disease
- Hyperparathyroidism
- Hypertension
- Malaria
- Priapism
- Spherocytosis
- Thalassemia