

SLC4A1 Rabbit Polyclonal Antibody



CAB17391

Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

102kDa

Calculated MW:

Applications:

WB

Reactivity:

Human, Mouse, Rat

Protein Background

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.

Antibody Information

Recommended dilutions:

WB 1:500 - 1:2000

Source:

Rabbit

Isotype:

IgG

Purification:

Affinity purification

Immunogen information

Gene ID:

6521

Uniprot

P02730

Synonyms:

DI; FR; SW; WD; WR; AE1; CHC; SAO; WD1; BND3; EPB3; SPH4; CD233; EMPB3; RTA1A; SLC4A1

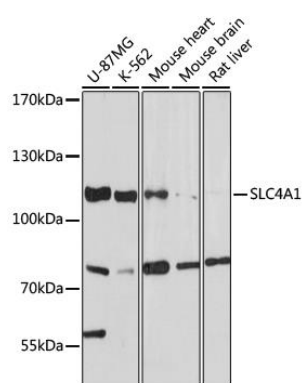
Immunogen:

Recombinant fusion protein containing a sequence corresponding to amino acids 1-353 of human SLC4A1 (NP_000333.1).

Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Product Images



Western blot analysis of extracts of various cell lines, using SLC4A1 antibody (CAB17391) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 30s.