SANTA CRUZ BIOTECHNOLOGY, INC.

SLC26A3 (N-12): sc-34942



BACKGROUND

The SLC26 family comprises sulfate/anion transporter genes. SLC26 family members are well conserved in their genomic (number and size of exons) and protein (amino acid length among species) structures, yet have markedly different tissue expression patterns. Members of the SLC26 family can mediate the electroneutral exchange of Cl^- for HCO_3^- across the plasma membrane of mammalian cells. Family members include SLC26A3 (also designated downregulated in adenoma), pendrin (SLC26A4), prestin (SLC26A5) and SLC26A6. SLC26A3 is a chloride/bicarbonate exchanger which is involved in absorption in the colon. SLC26A3 interacts with PDZK1 and helps mediate electrolyte and fluid absorption. Defects in SLC26A3 are the cause of congenital chloride diarrhea.

REFERENCES

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- 2. Hoglund, P., Sormaala, M., Haila, S., Socha, J., Rajaram, U., Scheurlen, W., Sinaasappel, M., de Jonge, H., Holmberg, C., Yoshikawa, H. and Kere, J. 2001. Identification of seven novel mutations including the first two genomic rearrangements in SLC26A3 mutated in congenital chloride diarrhea. Hum. Mutat. 18: 233-242.
- 3. Makela, S., Kere, J., Holmberg, C. and Hoglund, P. 2002. SLC26A3 mutations in congenital chloride diarrhea. Hum. Mutat. 20: 425-438.
- 4. Chernova, M.N., Jiang, L., Shmukler, B.E., Schweinfest, C.W., Blanco, P., Freedman, S.D., Stewart, A.K. and Alper, S.L. 2003. Acute regulation of the SLC26A3 congenital chloride diarrhea anion exchanger (DRA) expressed in Xenopus oocytes. J. Physiol. 549: 3-19.

CHROMOSOMAL LOCATION

Genetic locus: SLC26A3 (human) mapping to 7q31.1.

SOURCE

SLC26A3 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SLC26A3 of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-34942 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

SLC26A3 (N-12) is recommended for detection of SLC26A3 (also designated down-regulated in adenoma) of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SLC26A3 siRNA (h): sc-45543, SLC26A3 shRNA Plasmid (h): sc-45543-SH and SLC26A3 shRNA (h) Lentiviral Particles: sc-45543-V.

Molecular Weight of SLC26A3: 85 kDa.

Positive Controls: COLO 205 whole cell lysate: sc-364177.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



SLC26A3 (N-12): sc-34942. Western blot analysis of SLC26A3 expression in COLO 205 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Pierucci-Alves, F., Akoyev, V., Stewart, J.C. 3rd., Wang, L.H., Janardhan, K.S. and Schultz, B.D. 2011. Swine models of cystic fibrosis reveal male reproductive tract phenotype at birth. Biol. Reprod. 85: 442-451.

MONOS Satisfation Guaranteed

Try SLC26A3 (H-8): sc-376187, our highly recommended monoclonal alternative to SLC26A3 (N-12).