SANTA CRUZ BIOTECHNOLOGY, INC.

SLC43A3 (D-12): sc-132839

BACKGROUND

SLC43A3 (solute carrier family 43, member 3), also known as EEG1 (embryonic epithelia gene 1), FOAP-13, PRO1659 or SEEEG-1, is a 491 amino acid multi-pass membrane protein that belongs to the SLC43A trasporter family. Highly expressed in macrophages, SLC43A3 is thought to function as a transporter of metabolites and nutrients that are necessary during developmental events, such as organogenesis. Specifically, SLC43A3 is involved in epithelial development, including the formation of cell sheets and hollow tubes that are used for membrane interface and molecular transport. Multiple isoforms of SLC43A3 exist due to alternative splicing events.

REFERENCES

1. Li, M.S., et al. 1995. Human eosinophil major basic protein, a mediator of allergic inflammation, is expressed by alternative splicing from two promoters. Biochem. J. 305: 921-927.
2. Stuart, R.O., et al. 2001. EEG1, a putative transporter expressed during epithelial organogenesis: comparison with embryonic transporter expression during nephrogenesis. Am. J. Physiol. Renal Physiol. 281: F1148-F1156.
3. Otsuki, T., et al. 2005. Signal sequence and keyword trap in silico for selection of full-length human cDNAs encoding secretion or membrane proteins from oligo-capped cDNA libraries. DNA Res. 12: 117-126.
4. Piva, R., et al. 2006. Functional validation of the anaplastic lymphoma kinase signature identifies CEBPB and BCL2A1 as critical target genes. J. Clin. Invest. 116: 3171-3182.
5. Lo, K.C., et al. 2007. Genome wide copy number abnormalities in pediatric medulloblastomas as assessed by array comparative genome hybridization. Brain Pathol. 17: 282-296.
6. Wallgard, E., et al. 2008. Identification of a core set of 58 gene transcripts with broad and specific expression in the microvasculature. Arterioscler. Thromb. Vasc. Biol. 28: 1469-1476.

CHROMOSOMAL LOCATION

Genetic locus: SLC43A3 (human) mapping to 11q12.1.

SOURCE

SLC43A3 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SLC43A3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-132839 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.

APPLICATIONS

SLC43A3 (D-12) is recommended for detection of SLC43A3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other SLC43A family members.

SLC43A3 (D-12) is also recommended for detection of SLC43A3 in additional species, including canine.

Suitable for use as control antibody for SLC43A3 siRNA (h): sc-96371, SLC43A3 shRNA Plasmid (h): sc-96371-SH and SLC43A3 shRNA (h) Lentiviral Particles: sc-96371-V.

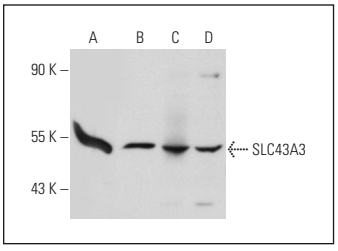
Molecular Weight of SLC43A3: 55 kDa.

Positive Controls: U-937 cell lysate: sc-2239, MCF7 whole cell lysate: sc-2206 or HL-60 whole cell lysate: sc-2209.

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) 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



SLC43A3 (D-12): sc-132839. Western blot analysis of SLC43A3 expression in U-937 (**A**), MCF7 (**B**), HL-60 (**C**) and Jurkat (**D**) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.