

SLC43A3 (E-10): sc-515451

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 transporter 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

- 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.
- 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.
- 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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: SLC43A3 (human) mapping to 11q12.1; Slc43a3 (mouse) mapping to 2 D.

SOURCE

SLC43A3 (E-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 208-226 within an internal region of SLC43A3 isoforms 1 and 2 of mouse origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-515451 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

SLC43A3 (E-10) is recommended for detection of SLC43A3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 SLC43A3 siRNA (h): sc-96371, SLC43A3 siRNA (m): sc-153564, SLC43A3 shRNA Plasmid (h): sc-96371-SH, SLC43A3 shRNA Plasmid (m): sc-153564-SH, SLC43A3 shRNA (h) Lentiviral Particles: sc-96371-V and SLC43A3 shRNA (m) Lentiviral Particles: sc-153564-V.

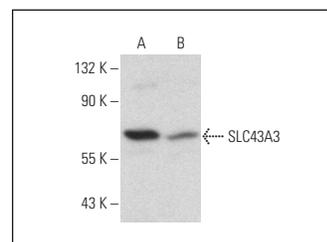
Molecular Weight of SLC43A3: 55 kDa.

Positive Controls: 3611-RF whole cell lysate: sc-2215, NIH/3T3 whole cell lysate: sc-2210 or Sol8 cell lysate: sc-2249.

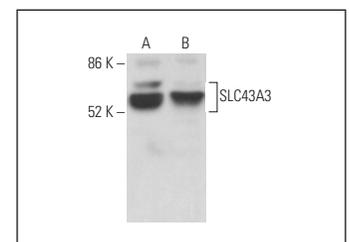
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SLC43A3 (E-10): sc-515451. Western blot analysis of SLC43A3 expression in NIH/3T3 (A) and Sol8 (B) whole cell lysates.



SLC43A3 (E-10): sc-515451. Western blot analysis of SLC43A3 expression in C3H/10T1/2 (A) and 3611-RF (B) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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