

SLC45A4 (T-18): sc-100158

BACKGROUND

SLC45A4 (solute carrier family 45, member 4), also known as KIAA1126, is a 768 amino acid multi-pass membrane protein that belongs to the glycoside-pentoside-hexuronide (GPH) cation symporter family. SLC45A4 is expressed as three alternatively spliced isoforms and is encoded by a gene which maps to chromosome 8. Consisting of nearly 146 million base pairs, chromosome 8 encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that maps to chromosome 8.

REFERENCES

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- McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. *Am. J. Hum. Genet.* 77: 582-595.
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- Nusbaum, C., et al. 2006. DNA sequence and analysis of human chromosome 8. *Nature* 439: 331-335.

CHROMOSOMAL LOCATION

Genetic locus: SLC45A4 (human) mapping to 8q24.3; Slc45a4 (mouse) mapping to 15 D3.

SOURCE

SLC45A4 (T-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SLC45A4 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-100158 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

SLC45A4 (T-18) is recommended for detection of SLC45A4 of mouse, rat and 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).

SLC45A4 (T-18) is also recommended for detection of SLC45A4 in additional species, including equine and canine.

Suitable for use as control antibody for SLC45A4 siRNA (h): sc-77846, SLC45A4 siRNA (m): sc-153565, SLC45A4 shRNA Plasmid (h): sc-77846-SH, SLC45A4 shRNA Plasmid (m): sc-153565-SH, SLC45A4 shRNA (h) Lentiviral Particles: sc-77846-V and SLC45A4 shRNA (m) Lentiviral Particles: sc-153565-V.

Molecular Weight of SLC45A4: 84 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

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