

SLC25A36 (G-16): sc-103222

BACKGROUND

SLC25A36 (solute carrier family 25, member 36) is a 311 amino acid multi-pass membrane protein that belongs to the mitochondrial carrier family. The SLC25A36 protein contains three Solcar repeats. SLC25A36 shares a homologous sequence with 61% amino acid identity to SLC25A33, as well as a 30% amino acid identity to SLC25A32. Existing as four alternatively spliced isoforms, the SLC25A36 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, fruit fly, mosquito, *C. elegans*, *S. pombe*, *S. cerevisiae*, *K. lactis*, *E. gossypii*, *M. grisea* and *N. crassa*, and maps to human chromosome 3q23. Chromosome 3 is made up of about 214 million bases encoding over 1,100 genes. Notably, there is a chemokine receptor gene cluster and a variety of human cancer related loci on chromosome 3. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Rearrangements of the long arm of chromosome 3, involving bands 3q21 and 3q26, are associated with normal or elevated levels of platelet counts in acute non-lymphocytic leukemia.

REFERENCES

- Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. Proc. Natl. Acad. Sci. USA 97: 206-211.
- Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. Mol. Biol. 37: 194-211.
- Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. Genomics 83: 193-202.
- Nareyeck, G., et al. 2006. Establishment and characterization of two uveal melanoma cell lines derived from tumors with loss of one chromosome 3. Exp. Eye Res. 83: 858-864.
- Haitina, T., et al. 2006. Fourteen novel human members of mitochondrial solute carrier family 25 (SLC25) widely expressed in the central nervous system. Genomics 88: 779-790.
- Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. Nature 440: 1194-1198.
- Rozsa, F.W., et al. 2007. Differential expression profile prioritization of positional candidate glaucoma genes: the GLC1C locus. Arch. Ophthalmol. 125: 117-127.

CHROMOSOMAL LOCATION

Genetic locus: SLC25A36 (human) mapping to 3q23.

SOURCE

SLC25A36 (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SLC25A36 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-103222 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLC25A36 (G-16) is recommended for detection of SLC25A36 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 isoform SLC25A36-2.

Suitable for use as control antibody for SLC25A36 siRNA (h): sc-78221, SLC25A36 shRNA Plasmid (h): sc-78221-SH and SLC25A36 shRNA (h) Lentiviral Particles: sc-78221-V.

Molecular Weight of SLC25A36 isoforms 1/2/3/4: 34/14/34/17 kDa.

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.

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.

PROTOCOLS

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