

SLC25A38 (B-10): sc-515883

BACKGROUND

SLC25A38 (solute carrier family 25, member 38) is a 304 amino acid multi-pass membrane protein that localizes to the inner mitochondrial membrane and contains three solcar repeats. SLC25A38 is thought to function as a mitochondrial carrier protein that is encoded by a gene which maps to human chromosome 3. Chromosome 3 houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-tooth disease are a few of the numerous genetic diseases associated with chromosome 3. Defects in the gene encoding SLC25A38 are the cause of nonsyn-dromic autosomal recessive congenital sideroblastic anemia.

REFERENCES

1. 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.
2. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
3. Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. *Genomics* 85: 36-47.
4. Darai, E., et al. 2005. Evolutionarily plastic regions at human 3p21.3 coincide with tumor breakpoints identified by the "elimination test." *Genomics* 86: 1-12.

CHROMOSOMAL LOCATION

Genetic locus: SLC25A38 (human) mapping to 3p22.1; Slc25a38 (mouse) mapping to 9 F4.

SOURCE

SLC25A38 (B-10) is a mouse monoclonal antibody raised against amino acids 13-53 mapping near the N-terminus of SLC25A38 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SLC25A38 (B-10) is available conjugated to agarose (sc-515883 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515883 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515883 PE), fluorescein (sc-515883 FITC), Alexa Fluor[®] 488 (sc-515883 AF488), Alexa Fluor[®] 546 (sc-515883 AF546), Alexa Fluor[®] 594 (sc-515883 AF594) or Alexa Fluor[®] 647 (sc-515883 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515883 AF680) or Alexa Fluor[®] 790 (sc-515883 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

SLC25A38 (B-10) is recommended for detection of SLC25A38 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 SLC25A38 siRNA (h): sc-78287, SLC25A38 siRNA (m): sc-153515, SLC25A38 shRNA Plasmid (h): sc-78287-SH, SLC25A38 shRNA Plasmid (m): sc-153515-SH, SLC25A38 shRNA (h) Lentiviral Particles: sc-78287-V and SLC25A38 shRNA (m) Lentiviral Particles: sc-153515-V.

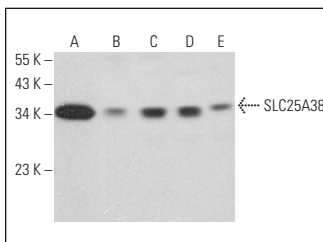
Molecular Weight of SLC25A38: 34 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, RAW 264.7 whole cell lysate: sc-2211 or NIH/3T3 whole cell lysate: sc-2210.

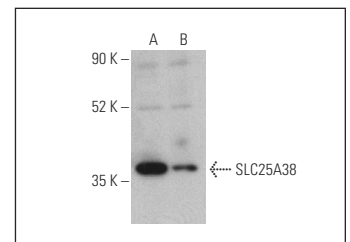
RECOMMENDED SUPPORT REAGENTS

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 A/G PLUS-Agarose: sc-2003 (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



SLC25A38 (B-10): sc-515883. Western blot analysis of SLC25A38 expression in HeLa (A), RAW 264.7 (B), WEHI-231 (C), C2C12 (D) and NIH/3T3 (E) whole cell lysates.



SLC25A38 (B-10): sc-515883. Western blot analysis of SLC25A38 expression in human stomach (A) and human tonsil (B) tissue extracts. Detection reagent used: m-IgG_{2a} BP-HRP: sc-542731.

SELECT PRODUCT CITATIONS

1. Wang, T., et al. 2018. Overexpression of apoptosis promotes mitochondrial damage in MIN6 cells. *Mol. Med. Rep.* 17: 7149-7155.

STORAGE

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

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