# SLC25A33 (m): 293T Lysate: sc-126005



The Power to Question

#### **BACKGROUND**

SLC25A33 (solute carrier family 25, member 33), also known as BMSC-MCP (bone marrow stromal cells-mitochondrial carrier protein), is a 321 amino acid multi-pass membrane protein that localizes to mitochondria. Belonging to the mitochondrial carrier superfamily of proteins, SLC25A33 is expressed in the central nervous system as well as in testis and skeletal muscle. SCL25A33 may act as a mitochondrial transporter that participates in dendritic cell endocytosis and may also be involved in mitochondrial oxidative phosphorylation. SLC25A33 is encoded by a gene located on human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

#### **REFERENCES**

- Wang, B., et al. 2004. HuBMSC-MCP, a novel member of mitochondrial carrier superfamily, enhances dendritic cell endocytosis. Biochem. Biophys. Res. Commun. 314: 292-300.
- 2. Palmieri, F. 2004. The mitochondrial transporter family (SLC25): physiological and pathological implications. Pflugers Arch. 447: 689-709.
- 3. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.
- 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.
- Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. Nature 441: 315-321.
- 6. Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. Anticancer Res. 26: 953-959.
- 7. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610816. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

## **CHROMOSOMAL LOCATION**

Genetic locus: Slc25a33 (mouse) mapping to 4 E2.

#### **PRODUCT**

SLC25A33 (m): 293T Lysate represents a lysate of mouse SLC25A33 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

SLC25A33 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SLC25A33 antibodies. Recommended use: 10-20  $\mu$ l per lane

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

#### **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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com