



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# SLC25A22 (m): 293T Lysate: sc-127546

## BACKGROUND

SLC25A22 (solute carrier family 25 member 22), also known as GC1 (mitochondrial glutamate carrier 1), is a 323 amino acid multi-pass membrane protein that belongs to the the SLC25 family of mitochondrial carriers that are responsible for transporting metabolites across the inner mitochondrial membrane. Existing as one of only two known mitochondrial glutamate/H<sup>+</sup> symporters, SLC25A22 is widely expressed and localizes to the mitochondrion inner membrane. SLC25A22 contains three Solcar repeats and plays an important role in the transport of glutamate across the inner mitochondrial membrane. Mutations in the gene encoding SLC25A22 are associated with myoclonic encephalopathy (EME). EME, also called neonatal epilepsy with suppression-burst pattern, is an autosomal recessive disorder characterized by early onset, massive myoclonus that is generally erratic and fragmentary, late tonic spasms and partial motor seizures. Patients with this disorder typically do not survive beyond 1-2 years after birth.

## REFERENCES

1. Palmieri, L., Pardo, B., Lasorsa, F.M., del Arco, A., Kobayashi, K., Iijima, M., Runswick, M.J., Walker, J.E., Saheki, T., Satrústegui, J. and Palmieri, F. 2001. Citrin and aralar1 are Ca<sup>2+</sup>-stimulated aspartate/glutamate transporters in mitochondria. *EMBO J.* 20: 5060-5069.
2. de Falco, F.A., Majello, L., Santangelo, R., Stabile, M., Bricarelli, F.D. and Zara, F. 2001. Familial infantile myoclonic epilepsy: clinical features in a large kindred with autosomal recessive inheritance. *Epilepsia* 42: 1541-1548.
3. Fiermonte, G., Palmieri, L., Todisco, S., Agrimi, G., Palmieri, F. and Walker, J.E. 2002. Identification of the mitochondrial glutamate transporter. Bacterial expression, reconstitution, functional characterization, and tissue distribution of two human isoforms. *J. Biol. Chem.* 277: 19289-19294.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609302. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Ohtahara, S. and Yamatogi, Y. 2003. Epileptic encephalopathies in early infancy with suppression-burst. *J. Clin. Neurophysiol.* 20: 398-407.
6. Palmieri, F. 2004. The mitochondrial transporter family (SLC25): physiological and pathological implications. *Pflugers Arch.* 447: 689-709.
7. Molinari, F., Raas-Rothschild, A., Rio, M., Fiermonte, G., Encha-Razavi, F., Palmieri, L., Palmieri, F., Ben-Neriah, Z., Kadhon, N., Vekemans, M., Attie-Bitach, T., Munnich, A., Rustin, P. and Colleaux, L. 2005. Impaired mitochondrial glutamate transport in autosomal recessive neonatal myoclonic epilepsy. *Am. J. Hum. Genet.* 76: 334-339.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: Slc25a22 (mouse) mapping to 7 F5.

## PRODUCT

SLC25A22 (m): 293T Lysate represents a lysate of mouse SLC25A22 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

SLC25A22 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SLC25A22 antibodies. Recommended use: 10-20 µl 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.