

Metaxin 1 (m): 293T Lysate: sc-121612

BACKGROUND

Metaxin 1, also known as Mtx or Gcap6, is a 317 amino acid member of the Metaxin protein family. Localized to the mitochondrion outer membrane, Metaxin 1 is involved in the transport of proteins into the mitochondrion. Metaxin 1 is also believed to be essential for embryonic development. Metaxin 1 has been found to interact with other Metaxin family members, including Metaxin 2. Although ubiquitously expressed, highest levels of Metaxin 1 are present in kidney. The gene that encodes Metaxin 1 maps to human chromosome 1, which is the largest human chromosome, spanning about 260 million base pairs and making up 8% of the human genome.

REFERENCES

- Long, G.L., et al. 1996. Structure and organization of the human metaxin gene (MTX) and pseudogene. *Genomics* 33: 177-184.
- Collins, M., et al. 1996. SP1-binding elements, within the common metaxin-thrombospondin 3 intergenic region, participate in the regulation of the metaxin gene. *Nucleic Acids Res.* 24: 3661-3669.
- Armstrong, L.C., et al. 1997. Metaxin is a component of a preprotein import complex in the outer membrane of the mammalian mitochondrion. *J. Biol. Chem.* 272: 6510-6518.
- Mootha, V.K., et al. 2003. Integrated analysis of protein composition, tissue diversity, and gene regulation in mouse mitochondria. *Cell* 115: 629-640.
- Da Cruz, S., et al. 2003. Proteomic analysis of the mouse liver mitochondrial inner membrane. *J. Biol. Chem.* 278: 41566-41571.
- Zambrowicz, B.P., et al. 2003. Wnk1 kinase deficiency lowers blood pressure in mice: a gene-trap screen to identify potential targets for therapeutic intervention. *Proc. Natl. Acad. Sci. USA* 100: 14109-14114.
- Karim, S.A., et al. 2004. A physical map of the genomic region on mouse chromosome 3 containing the hindshaker (hsh) mutation. *Genomics* 83: 225-230.
- Pagliarini, D.J., et al. 2008. A mitochondrial protein compendium elucidates complex I disease biology. *Cell* 134: 112-123.
- Sansom, S.N., et al. 2009. The level of the transcription factor Pax-6 is essential for controlling the balance between neural stem cell self-renewal and neurogenesis. *PLoS Genet.* 5: e1000511.

CHROMOSOMAL LOCATION

Genetic locus: Mtx1 (mouse) mapping to 3 F1.

PRODUCT

Metaxin 1 (m): 293T Lysate represents a lysate of mouse Metaxin 1 transfected 293T cells and is provided as 100 µg protein in 200 µl 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.

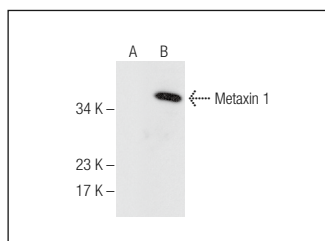
APPLICATIONS

Metaxin 1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Metaxin 1 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.

Metaxin 1 (28): sc-135989 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Metaxin 1 expression in Metaxin 1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



Metaxin 1 (28): sc-135989. Western blot analysis of Metaxin 1 expression in non-transfected: sc-117752 (A) and mouse Metaxin 1 transfected: sc-121612 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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