

# Produktinformation



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Diagnostik & molekulare Diagnostik



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# Mog1p (m): 293T Lysate: sc-125628



The Power to Overtion

#### **BACKGROUND**

The small Ras-related protein, Ran, also called TC4, is a nuclear GTPase implicated in a diverse array of cellular processes including DNA replication, entry into and exit from mitosis and the transport of RNA and proteins through the nuclear pore complex. Mog1p, also known as RanGNRF (Ran guanine nucleotide release factor) or Ran-binding protein MOG1, is a 186 amino acid protein that shuttles between the nucleus and the cytoplasm and is thought to regulate the intracellular trafficking of Ran. Mog1p has been found to be a monomer that interacts with Ran and Na+ CP type V $\alpha$ , as well as forms a complex with Ran and Ran BP-1. Mog1p exists as four isoforms produced by alternative splicing events, with isoforms one and two being expressed ubiquitously.

#### **REFERENCES**

- Moroianu, J. and Blobel, G. 1995. Protein export from the nucleus requires the GTPase Ran and GTP hydrolysis. Proc. Natl. Acad. Sci. USA 92: 4318-4322.
- Zhang, Q.H., Ye, M., Wu, X.Y., Ren, S.X., Zhao, M., Zhao, C.J., Fu, G., Shen, Y., Fan, H.Y., Lu, G., Zhong, M., Xu, X.R., Han, Z.G., Zhang, J.W., Tao, J., Huang, Q.H., Zhou, J., Hu, G.X., Gu, J., Chen, S.J. and Chen, Z. 2000. Cloning and functional analysis of cDNAs with open reading frames for 300 previously undefined genes expressed in CD34+ hematopoietic stem/progenitor cells. Genome Res. 10: 1546-1560.
- Steggerda, S.M. and Paschal, B.M. 2000. The mammalian Mog1 protein is a guanine nucleotide release factor for Ran. J. Biol. Chem. 275: 23175-23180.
- Marfatia, K.A., Harreman, M.T., Fanara, P., Vertino, P.M. and Corbett, A.H. 2001. Identification and characterization of the human MOG1 gene. Gene 266: 45-56.
- Steggerda, S.M. and Paschal, B.M. 2001. Identification of a conserved loop in Mog1 that releases GTP from Ran. Traffic 2: 804-811.
- Bradford, J.R., Needham, C.J., Bulpitt, A.J. and Westhead, D.R. 2006. Insights into protein-protein interfaces using a Bayesian network prediction method. J. Mol. Biol. 362: 365-386.
- Xu, Q., Krishna, S.S., McMullan, D., Schwarzenbacher, R., Miller, M.D., Abdubek, P., Agarwalla, S., Ambing, E., Astakhova, T., Axelrod, H.L., Canaves, J.M., Carlton, D., Chiu, H.J., Clayton, T., DiDonato, M., et al. 2006. Crystal structure of an ORFan protein (TM1622) from *Thermotoga maritima* at 1.75 A resolution reveals a fold similar to the Ran-binding protein Mog1p. Proteins 65: 777-782.
- 8. Wu, L., Yong, S.L., Fan, C., Ni, Y., Yoo, S., Zhang, T., Zhang, X., Obejero-Paz, C.A., Rho, H.J., Ke, T., Szafranski, P., Jones, S.W., Chen, Q. and Wang, Q.K. 2008. Identification of a new co-factor, MOG1, required for the full function of cardiac sodium channel Nav 1.5. J. Biol. Chem. 283: 6968-6978.

### **CHROMOSOMAL LOCATION**

Genetic locus: Rangrf (mouse) mapping to 11 B3.

#### **RESEARCH USE**

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

#### **PRODUCT**

Mog1p (m): 293T Lysate represents a lysate of mouse Mog1p transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

#### **APPLICATIONS**

Mog1p (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Mog1p antibodies. Recommended use: 10-20 µl per lane.

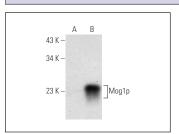
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Mog1p (C-2): sc-393574 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Mog1p expression in Mog1p transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

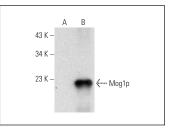
#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### **DATA**







Mog1p (F-8): sc-398128. Western blot analysis of Mog1p expression in non-transfected: sc-117752 (**A**) and mouse Mog1p transfected: sc-125628 (**B**) 293T whole cell lysates

#### **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 for detailed protocols and support products.