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# ERGIC-53 (m): 293T Lysate: sc-120100

## BACKGROUND

Lectin mannose-binding 1, also designated vesicular integral-membrane protein (VIP36) and lectin mannose-binding 2, also designated ER-Golgi intermediate compartment (ERGIC-53) comprise a family of membrane-bound, ubiquitous proteins involved in the selective transport of newly synthesized glycoproteins from the endoplasmic reticulum (ER) to the ER-Golgi intermediate compartment (ERGIC). VIP36 acts as an intracellular lectin in the early secretory pathway. It is involved in the sorting and transport of glycoproteins carrying high mannose-type glycans. ERGIC-53, a mannose-specific lectin, recognizes sugar residues of glycoproteins and glycolipids. It mediates the sorting and recycling of proteins and/or lipids. Null expression of ERGIC-53, also designated LMAN1, results in a rare autosomal recessive bleeding disorder that causes combined deficiency of both coagulation factors V and VIII.

## REFERENCES

1. Schindler, R., Itin, C., Zerial, M., Lottspeich, F. and Hauri, H.P. 1993. ERGIC-53, a membrane protein of the ER-Golgi intermediate compartment, carries an ER retention motif. *Eur. J. Cell Biol.* 61: 1-9.
2. Kappeler, F., Itin, C., Schindler, R. and Hauri, H.P. 1994. A dual role for COOH-terminal lysine residues in pre-Golgi retention and endocytosis of ERGIC-53. *J. Biol. Chem.* 269: 6279-6281.
3. Hauri, H.P., Nufer, O., Breuza, L., Tekaya, H.B. and Liang, L. 2002. Lectins and protein traffic early in the secretory pathway. *Biochem. Soc. Symp.* 69: 73-82.
4. Cunningham, M.A., Pipe, S.W., Zhang, B., Hauri, H.P., Ginsburg, D. and Kaufman, R.J. 2003. LMAN1 is a molecular chaperone for the secretion of coagulation factor VIII. *J. Thromb. Haemost.* 1: 2360-2367.
5. Hara-Kuge, S., Seko, A., Shimada, O., Tosaka-Shimada, H. and Yamashita, K. 2004. The binding of VIP36 and  $\alpha$ -Amylase in the secretory vesicles via high-mannose type glycans. *Glycobiology* 14: 739-744.
6. Kamiya, Y., Yamaguchi, Y., Takahashi, N., Arata, Y., Kasai, K., Ihara, Y., Matsuo, I., Ito, Y., Yamamoto, K. and Kato, K. 2005. Sugar-binding properties of VIP36, an intracellular animal lectin operating as a cargo receptor. *J. Biol. Chem.* 280: 37178-37182.
7. Neve, E.P., Lahtinen, U. and Pettersson, R.F. 2005. Oligomerization and intercellular localization of the glycoprotein receptor ERGIC-53 is independent of disulfide bonds. *J. Mol. Biol.* 354: 556-568.

## CHROMOSOMAL LOCATION

Genetic locus: Lman1 (mouse) mapping to 18 E1.

## PRODUCT

ERGIC-53 (m): 293T Lysate represents a lysate of mouse ERGIC-53 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

ERGIC-53 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ERGIC-53 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

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