

LZIP (m): 293T Lysate: sc-125570

BACKGROUND

HCF-1 is a cellular protein required by VP16, a viral tegument, to activate the herpes simplex virus (HSV) immediate-early genes. In addition to playing an essential role in cell proliferation, HCF-1 also functions as a coactivator for the basic leucine zipper transcription factor LZIP (also designated Luman or CREB3). Both LZIP and VP16 contain the binding motif (D/E) HXY (S/A), which is recognized by an amino terminal β -propeller domain in HCF-1. LZIP, a member of the ATF/CREB family, is a type II membrane-associated glycoprotein that is ubiquitously expressed in adult and fetal tissues. LZIP associates with the endoplasmic reticulum, where it sequesters most of the cellular HCF-1. Like other CREB/ATF family members, LZIP activates transcription from genes containing cyclic AMP response elements (CREs). LZIP activity is repressed by the inhibitory interaction of HCLP-1.

REFERENCES

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2. Lu, R., Yang, P., Padmakumar, S. and Misra, V. 1998. The herpesvirus transactivator VP16 mimics a human basic domain leucine zipper protein, luman, in its interaction with HCF. *J. Virol.* 72: 6291-6297.
3. Zhou, H.J., Wong, C.M., Chen, J.H., Qiang, B.Q., Yuan, J.G. and Jin, D.Y. 2001. Inhibition of LZIP-mediated transcription through direct interaction with a novel host cell factor-like protein. *J. Biol. Chem.* 276: 28933-28938.
4. Mahajan, S.S., Little, M.M., Vazquez, R. and Wilson, A.C. 2002. Interaction of HCF1 with a cellular nuclear export factor. *J. Biol. Chem.* 277: 44292-44299.
5. Raggo, C., Rapin, N., Stirling, J., Gobeil, P., Smith-Windsor, E., O'Hare, P. and Misra, V. 2002. Luman, the cellular counterpart of herpes simplex virus VP16, is processed by regulated intramembrane proteolysis. *Mol. Cell. Biol.* 22: 5639-5649.

CHROMOSOMAL LOCATION

Genetic locus: Creb3 (mouse) mapping to 4 B1.

PRODUCT

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

APPLICATIONS

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

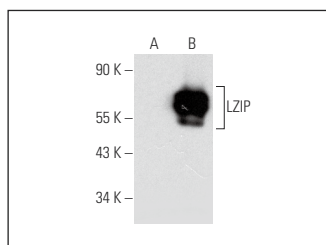
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

LZIP (H-7): sc-515434 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse LZIP expression in LZIP 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-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



LZIP (H-7): sc-515434. Western blot analysis of LZIP expression in non-transfected: sc-117752 (A) and mouse LZIP transfected: sc-125570 (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.

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.