# LCOR (h): 293T Lysate: sc-116449



The Power to Question

#### **BACKGROUND**

LCOR (Ligand-dependent corepressor), also referred as MLR2, is a 433 amino acid transcriptional corepressor that contains an LXXLL motif, a nuclear localization signal and a helix-loop-helix domain. LCOR is widely expressed in fetal and adult tissues and is recruited to nuclear receptors through its LXXLL motif. LCOR interacts with several estrogen receptors, such as ER $\alpha$  and ER $\beta$  in the presence of estradiol. Additionally, LCOR acts as a molecular scaffold, functioning to recruit proteins involved in transcriptional repression to the DNA. LCOR activity is inhibited in a receptor-dependent fashion by the HDAC (histone deacetylase) inhibitor trichostatin A, suggesting HDAC-dependent mode of action. LCOR functions in a negative feedback loop to reduce hormone-induced transactivation.

## **REFERENCES**

- Jenster, G. 1998. Coactivators and corepressors as mediators of nuclear receptor function: an update. Mol. Cell. Endocrinol. 143: 1-7.
- 2. Fernandes, I. and White, J.H. 2003. Agonist-bound nuclear receptors: not just targets of coactivators. J. Mol. Endocrinol. 31: 1-7.
- Fernandes, I., Bastien, Y., Wai, T., Nygard, K., Lin, R., Cormier, O., Lee, H.S., Eng, F., Bertos, N.R., Pelletier, N., Mader, S., Han, V.K., Yang, X.J. and White, J.H. 2003. Ligand-dependent nuclear receptor corepressor LCoR functions by histone deacetylase-dependent and -independent mechanisms. Mol. Cell 11: 139-150.
- Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607698. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 5. Privalsky, M.L. 2004. The role of corepressors in transcriptional regulation by nuclear hormone receptors. Annu. Rev. Physiol. 66: 315-360.
- White, J.H., Fernandes, I., Mader, S. and Yang, X.J. 2004. Corepressor recruitment by agonist-bound nuclear receptors. Vitam. Horm. 68: 123-143.
- 7. SWISS-PROT/TrEMBL (Q96JN0). World Wide Web URL: http://www.expasy.ch/sprot/sprot-top.html

# **CHROMOSOMAL LOCATION**

Genetic locus: LCOR (human) mapping to 10q24.1.

#### **PRODUCT**

LCOR (h): 293T Lysate represents a lysate of human LCOR transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

# **APPLICATIONS**

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

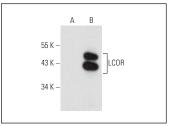
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

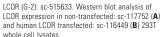
LCOR (G-2): sc-515633 is recommended as a positive control antibody for Western Blot analysis of enhanced human LCOR expression in LCOR transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

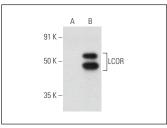
## **RECOMMENDED SUPPORT REAGENTS**

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® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### DATA







LCOR (G-4): sc-515594. Western blot analysis of LCOR expression in non-transfected: sc-117752 (A) and human LCOR transfected: sc-116449 (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.