

## LCOR (C-6): sc-377019

### 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.
- Fernandes, I. and White, J.H. 2003. Agonist-bound nuclear receptors: not just targets of coactivators. *J. Mol. Endocrinol.* 31: 1-7.
- Fernandes, I., et al. 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<sup>™</sup>. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607698. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

### CHROMOSOMAL LOCATION

Genetic locus: LCOR (human) mapping to 10q24.1; Lcor (mouse) mapping to 19 C3.

### SOURCE

LCOR (C-6) is a mouse monoclonal antibody raised against amino acids 87-281 mapping within an internal region of LCOR of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LCOR (C-6) is available conjugated to agarose (sc-377019 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377019 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377019 PE), fluorescein (sc-377019 FITC), Alexa Fluor<sup>®</sup> 488 (sc-377019 AF488), Alexa Fluor<sup>®</sup> 546 (sc-377019 AF546), Alexa Fluor<sup>®</sup> 594 (sc-377019 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-377019 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-377019 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-377019 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor<sup>®</sup> is a trademark of Molecular Probes, Inc., Oregon, USA

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### APPLICATIONS

LCOR (C-6) is recommended for detection of LCOR of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LCOR (C-6) is also recommended for detection of LCOR in additional species, including bovine.

Suitable for use as control antibody for LCOR siRNA (h): sc-90371, LCOR siRNA (m): sc-146685, LCOR shRNA Plasmid (h): sc-90371-SH, LCOR shRNA Plasmid (m): sc-146685-SH, LCOR shRNA (h) Lentiviral Particles: sc-90371-V and LCOR shRNA (m) Lentiviral Particles: sc-146685-V.

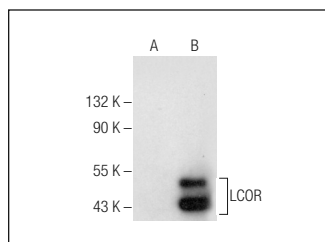
Molecular Weight of LCOR: 47 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or LCOR (h): 293T Lysate: sc-116449.

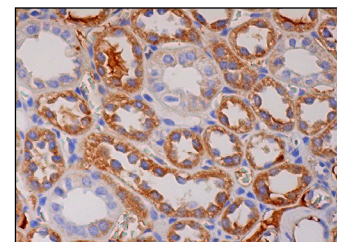
### RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

### DATA



LCOR (C-6): sc-377019. Western blot analysis of LCOR expression in non-transfected: sc-117752 (A) and human LCOR transfected: sc-116449 (B) 293T whole cell lysates.



LCOR (C-6): sc-377019. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic and membrane staining of cells in tubules.

### SELECT PRODUCT CITATIONS

- Flindris, S., et al. 2021. The expression of NRIP1 and LCOR in endometrioid endometrial cancer. *In Vivo* 35: 2631-2640.

### RESEARCH USE

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