

LCOR (C-4): sc-398636

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 α and ER β 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™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607698. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Privalsky, M.L. 2004. The role of corepressors in transcriptional regulation by nuclear hormone receptors. *Annu. Rev. Physiol.* 66: 315-360.
- White, J.H., et al. 2004. Corepressor recruitment by agonist-bound nuclear receptors. *Vitam. Horm.* 68: 123-143.

CHROMOSOMAL LOCATION

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

SOURCE

LCOR (C-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 291-334 within an internal region of LCOR of human origin.

PRODUCT

Each vial contains 200 μ g IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-398636 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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-4) 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 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (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-4) is also recommended for detection of LCOR in additional species, including equine, canine, porcine and avian.

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.

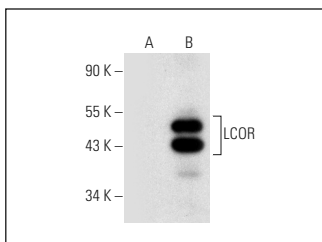
Molecular Weight of LCOR: 47 kDa.

Positive Controls: LCOR (h): 293T Lysate: sc-116449 or HT-29 whole cell lysate: sc-364232.

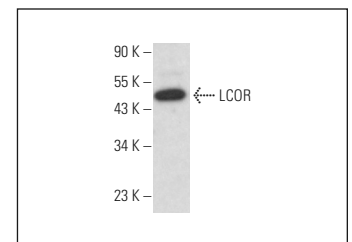
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



LCOR (C-4): sc-398636. 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-4): sc-398636. Western blot analysis of LCOR expression in HT-29 whole cell lysate.

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.