SANTA CRUZ BIOTECHNOLOGY, INC.

LCOR (G-4): sc-515594

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 ERα and ERβ 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

1. Jenster, G. 1998. Coactivators and corepressors as mediators of nuclear receptor function: an update. Mol. Cell. Endocrinol. 143: 1-7.
2. Fernandes, I., et al. 2003. Agonist-bound nuclear receptors: not just targets of coactivators. J. Mol. Endocrinol. 31: 1-7.
3. Fernandes, I., et al. 2003. Ligand-dependent nuclear receptor corepressor LCoR functions by histone deacetylase-dependent and -independent mechanisms. Mol. Cell 11: 139-150.
4. 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.
6. White, J.H., et al. 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; Lcor (mouse) mapping to 19 C3.

SOURCE

LCOR (G-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 57-76 near the N-terminus of LCOR of human origin.

PRODUCT

Each vial contains 200 µg IgA in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-515594 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

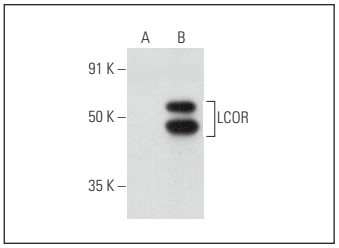
LCOR (G-4) is recommended for detection of LCOR of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

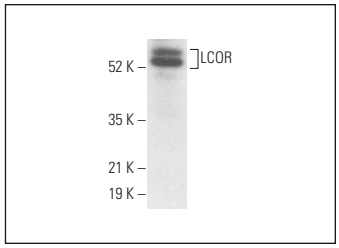
Molecular Weight of LCOR: 47 kDa.

Positive Controls: LCOR (h): 293T Lysate: sc-116449 or Hep G2 cell lysate: sc-2227.

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.



LCOR (G-4): sc-515594. Western blot analysis of LCOR expression in Hep G2 whole cell lysate.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.