

EAR2 (L-12): sc-23229

BACKGROUND

EAR2 (v-erb-a avian erythroblastic leukemia viral oncogene homolog-like 2) protein binds a cis enhancer element (TGACCT motif) upstream of the renin gene and represses renin gene transcription. EAR2 also contributes to gonadotropin-dependent derepression of LHR promoter activity in granulosa cells. EAR2 mRNA is abundant in the liver, and EAR2 protein localizes to the nucleus of As4.1 cells.

REFERENCES

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2. Barnhart, K.M. and Mellon, P.L. 1994. The sequence of a murine cDNA encoding EAR2, a nuclear orphan receptor. *Gene* 142: 313-314.
3. Islam, T.C. and Toftgård, R. 1994. Nuclear orphan receptor-binding retinoic acid response elements in keratinocytes. *Biochem. Biophys. Res. Commun.* 203: 545-552.
4. Chu, K. and Zingg, H.H. 1997. The nuclear orphan receptors COUP-TFII and EAR2 act as silencers of the human oxytocin gene promoter. *J. Mol. Endocrinol.* 19: 163-172.
5. Chu, K., Boutin, et al. 1998. Nuclear orphan receptors COUP-TFII and EAR2: presence in oxytocin-producing uterine cells and functional interaction with the oxytocin gene promoter. *Mol. Cell. Endocrinol.* 137: 145-154.
6. Zhang, Y. and Dufau, M.L. 2000. Nuclear orphan receptors regulate transcription of the gene for the human luteinizing hormone receptor. *J. Biol. Chem.* 275: 2763-2770.

CHROMOSOMAL LOCATION

Genetic locus: NR2F6 (human) mapping to 19p13.11; Nr2f6 (mouse) mapping to 8 B3.3.

SOURCE

EAR2 (L-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EAR2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-23229 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-23229 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

EAR2 (L-12) is recommended for detection of EAR2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

EAR2 (L-12) is also recommended for detection of EAR2 in additional species, including porcine.

Suitable for use as control antibody for EAR2 siRNA (h): sc-38822, EAR2 siRNA (m): sc-38823, Ear2 siRNA (m): sc-155888, EAR2 shRNA Plasmid (h): sc-38822-SH, EAR2 shRNA Plasmid (m): sc-38823-SH, Ear2 shRNA Plasmid (m): sc-155888-SH, EAR2 shRNA (h) Lentiviral Particles: sc-38822-V, EAR2 shRNA (m) Lentiviral Particles: sc-38823-V and Ear2 shRNA (m) Lentiviral Particles: sc-155888-V.

EAR2 (L-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

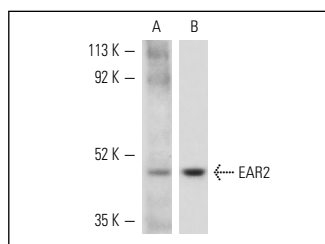
Molecular Weight of EAR2: 48 kDa.

Positive Controls: rat liver extract: sc-2395 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Western blot analysis of EAR2 expression in rat liver tissue extract (A) and Hep G2 whole cell lysate (B). Antibodies tested include EAR2 (E-12): sc-23230 (A) and EAR2 (L-12): sc-23229 (B).

RESEARCH USE

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