SANTA CRUZ BIOTECHNOLOGY, INC.

EAR2 (m): 293T Lysate: sc-119899

BACKGROUND

COUP (chicken ovalbumin upstream promoter) transcription factors have been cloned in several species and identified as orphan members of the steroid/thyroid hormone receptor superfamily. COUP-TFI (also designated COUP or EAR3) and ARP-1 (also designated COUP-TFII) exhibit highly regulated and overlapping expression in most tissues. COUP-TFs are highly expressed in the developing and central nervous system, suggesting that these factors may be important in neural development and differentiation. COUP-TFs can compete for binding to response elements which are common to other members of this family, including RAR, RXR, PPAR, HNF-4, VDR and TR. They have been shown to act as negative regulators as well as initiators of transcription.

REFERENCES

1. Miyajima, N., et al. 1988. Identification of two novel members of Erb A superfamily by molecular cloning: the gene products of the two are highly related to each other. Nucleic Acids Res. 16: 11057-11074.
2. Wang, L.H., et al. 1989. COUP transcription factor is a member of the steroid receptor superfamily. Nature 340: 163-166.
3. Ladias, J.A.A., et al. 1991. Regulation of the apolipoprotein AL gene by ARP-1, a novel member of the steroid receptor superfamily. Science 251: 56165.
4. Umesono, K., et al. 1991. Direct repeats as selective response elements for the thyroid hormone, retinoic acid and vitamin D_3 receptors. Cell 65: 1255-1266.
5. Cooney, A., et al. 1993. Multiple mechanisms of chicken ovalbumin upstream promoter transcription factor-dependent repression of transactivation by the vitamin D, thyroid hormone and retinoic acid receptors. J. Biol. Chem. 268: 4152-4160.
6. Jonk, L.J.C., et al. 1994. Cloning and expression during development of three murine members of the COUP family of nuclear orphan receptors. Mech. Dev. 47: 81-97.
7. Liu, P.X., et al. 1994. An evolutionary conserved COUP-TF binding element in a neural-specific gene and COUP-TF expression patterns support a major role for COUP-TF in neural development. Mol. Endocrinol. 8: 1774-1788.

CHROMOSOMAL LOCATION

Genetic locus: Nr2f6 (mouse) mapping to 8 B3.3.

PRODUCT

EAR2 (m): 293T Lysate represents a lysate of mouse EAR2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

PROTOCOLS

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

APPLICATIONS

EAR2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive EAR2 antibodies. Recommended use: 10-20 µl per lane.

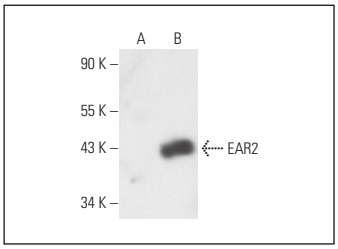
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

COUP-TF/EAR2 (F-11): sc-166941 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse EAR2 expression in EAR2 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-IgGκ BP-HRP: sc-516102 or m-IgGκ 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.

DATA



COUP-TF/EAR2 (F-11): sc-166941. Western blot analysis of EAR2 expression in non-transfected: sc-117752 (**A**) and mouse EAR2 transfected: sc-119899 (**B**) 293T whole cell lysates.

RESEARCH USE

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