

# COUP-TF/EAR2 (H-230): sc-30180

## 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<sub>3</sub> receptors. *Cell* 65: 1255-1266.
5. Cooney, A., et al. 1993. Multiple mechanisms of chicken ovalbumin upstream promoter transcription factor-dependent repression of *trans*-activation 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.

## SOURCE

COUP-TF/EAR2 (H-230) is a rabbit polyclonal antibody raised against amino acids 121-350 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-30180 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

COUP-TF/EAR2 (H-230) is recommended for detection of COUP-TFI, ARP-1 and 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).

COUP-TF/EAR2 (H-230) is also recommended for detection of COUP-TFI, ARP-1 and EAR2 in additional species, including canine, bovine and porcine.

COUP-TF/EAR2 (H-230) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

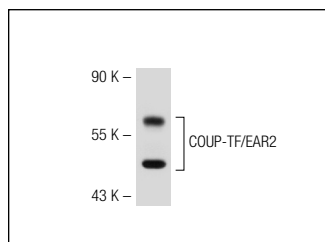
Molecular Weight of COUP-TF/EAR2: 45 kDa.

Positive Controls: Ramos cell lysate: sc-2216 or Hep G2 cell lysate: sc-2227.

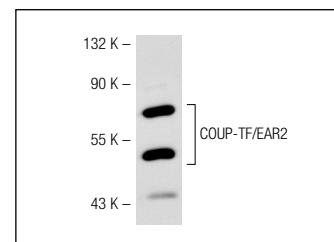
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



COUP-TF/EAR2 (H-230): sc-30180. Western blot analysis of COUP-TF/EAR2 expression in Ramos whole cell lysate.



COUP-TF/EAR2 (H-230): sc-30180. Western blot analysis of COUP-TF/EAR2 expression in Hep G2 whole cell lysate.

## RESEARCH USE

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



Try **COUP-TF/EAR2 (F-11): sc-166941**, our highly recommended monoclonal alternative to COUP-TF/EAR2 (H-230).