

# COUP-TFI (H-11): sc-74561

## 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 EAR-3) 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

- Miyajima, N., et al. 1988. Identification of two novel members of ErbA superfamily by molecular cloning: the gene products of the two are highly related to each other. *Nucleic Acids Res.* 16: 11057-11074.
- Wang, L.H., et al. 1989. COUP transcription factor is a member of the steroid receptor superfamily. *Nature* 340: 163-166.
- Ladias, J.A., et al. 1991. Regulation of the apolipoprotein AI gene by ARP-1, a novel member of the steroid receptor superfamily. *Science* 251: 561-565.
- 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.

## CHROMOSOMAL LOCATION

Genetic locus: NR2F1 (human) mapping to 5q14, NR2F2 (human) mapping to 15q26; Nr2f1 (mouse) mapping to 13 C1, Nr2f2 (mouse) mapping to 7 D1.

## SOURCE

COUP-TFI (H-11) is a mouse monoclonal antibody raised against amino acids 261-320 mapping within an internal region of COUP-TFI of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain 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-74561 X, 200 µg/0.1 ml.

COUP-TFI (H-11) is available conjugated to agarose (sc-74561 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-74561 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-74561 PE), fluorescein (sc-74561 FITC), Alexa Fluor® 488 (sc-74561 AF488), Alexa Fluor® 546 (sc-74561 AF546), Alexa Fluor® 594 (sc-74561 AF594) or Alexa Fluor® 647 (sc-74561 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-74561 AF680) or Alexa Fluor® 790 (sc-74561 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## STORAGE

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

## APPLICATIONS

COUP-TFI (H-11) is recommended for detection of COUP-TFI and ARP-1 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).

COUP-TFI (H-11) is also recommended for detection of COUP-TFI and ARP-1 in additional species, including equine, canine, bovine, porcine and avian.

COUP-TFI (H-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

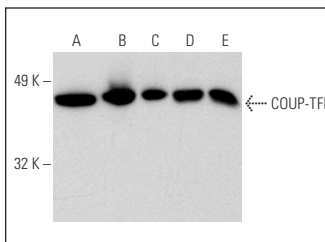
Molecular Weight of COUP-TFI: 46 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, U-87 MG cell lysate: sc-2411 or Hep G2 cell lysate: sc-2227.

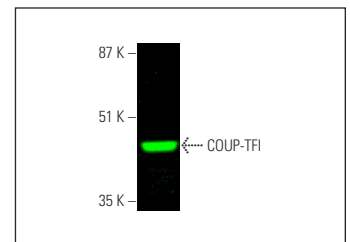
## RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



COUP-TFI (H-11): sc-74561. Western blot analysis of COUP-TFI expression in SK-N-SH (A), U-87 MG (B) and Hep G2 (C) whole cell lysates and mouse brain (D) and rat brain (E) tissue extracts.



COUP-TFI (H-11): sc-74561. Near-infrared western blot analysis of COUP-TFI expression in HCT-116 whole cell lysate. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.

## SELECT PRODUCT CITATIONS

- Panaccione, A., et al. 2016. NOTCH1 and SOX10 are essential for proliferation and radiation resistance of cancer stem-like cells in adenoid cystic carcinoma. *Clin. Cancer Res.* 22: 2083-2095.

## RESEARCH USE

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

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