

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

1. 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.
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., et al. 1991. Regulation of the apolipoprotein AI gene by ARP-1, a novel member of the steroid receptor superfamily. *Science* 251: 561-565.
4. Umesono, K., et al. 1991. Direct repeats as selective response elements for the thyroid hormone, retinoic acid and vitamin D₃ 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_{2a} 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.

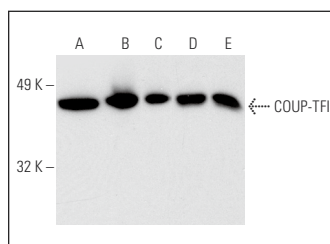
Molecular Weight of COUP-TFI: 46 kDa.

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

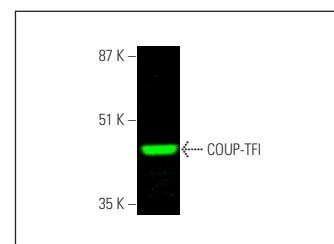
RECOMMENDED SUPPORT REAGENTS

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

1. 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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