

# COUP-TFI (G-6): sc-74560

## 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 A1 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 5q15, NR2F2 (human) mapping to 15q26.2; Nr2f1 (mouse) mapping to 13 C1, Nr2f2 (mouse) mapping to 7 D1.

## SOURCE

COUP-TFI (G-6) 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-74560 X, 200 µg/0.1 ml.

## APPLICATIONS

COUP-TFI (G-6) 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 (G-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

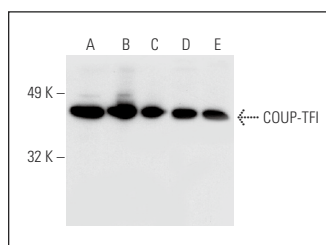
Molecular Weight of COUP-TFI: 46 kDa.

Positive Controls: mouse brain extract: sc-2253, rat brain extract: sc-2392 or SK-N-SH cell lysate: sc-2410.

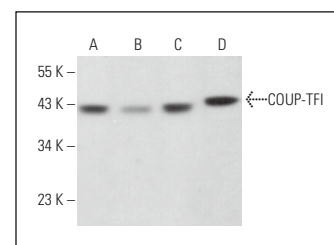
## RECOMMENDED SUPPORT REAGENTS

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 (G-6): sc-74560. 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 (G-6): sc-74560. Western blot analysis of COUP-TFI expression in SK-N-SH (A), H4 (B), T98G (C) and C6 (D) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Lathen, C., et al. 2014. ERG-APLN axis controls pulmonary venule endothelial proliferation in pulmonary veno-occlusive disease. *Circulation* 130: 1179-1191.
- Jia, Q., et al. 2019. Low levels of Sox2 are required for melanoma tumor-repopulating cell dormancy. *Theranostics* 9: 424-435.
- Greenberg, R.S., et al. 2019. Single amino acid change underlies distinct roles of H2A.Z subtypes in human syndrome. *Cell* 178: 1421-1436.e24.
- Ruan, X., et al. 2023. RBMS3-induced circHECTD1 encoded a novel protein to suppress the vasculogenic mimicry formation in glioblastoma multiforme. *Cell Death Dis.* 14: 745.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

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