

# ARP-1 (E-11): sc-271940

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: NR2F2 (human) mapping to 15q26.2; Nr2f2 (mouse) mapping to 7 D1.

## SOURCE

ARP-1 (E-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 13-44 at the N-terminus of ARP-1 of human origin.

## PRODUCT

Each vial contains 200 µg IgM lambda 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-271940 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-271940 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

ARP-1 (E-11) is recommended for detection of 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ARP-1 (E-11) is also recommended for detection of ARP-1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for ARP-1 siRNA (h): sc-38818, ARP-1 siRNA (m): sc-38819, ARP-1 shRNA Plasmid (h): sc-38818-SH, ARP-1 shRNA Plasmid (m): sc-38819-SH, ARP-1 shRNA (h) Lentiviral Particles: sc-38818-V and ARP-1 shRNA (m) Lentiviral Particles: sc-38819-V.

ARP-1 (E-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

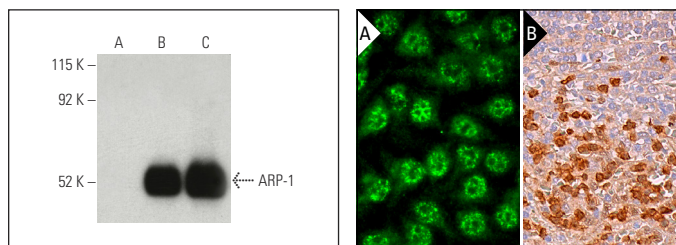
Molecular Weight of ARP-1: 45 kDa.

Positive Controls: ARP-1 (h2): 293T Lysate: sc-115650, ARP-1 (m): 293T Lysate: sc-126444 or Ramos nuclear extract: sc-2153.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-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 L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGλ BP-FITC: sc-516185 or m-IgGλ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGλ BP-HRP: sc-516132 with DAB, 50X: sc-24982 and Immunohistochem mount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



ARP-1 (E-11): sc-271940. Western blot analysis of ARP-1 expression in non-transfected: sc-117752 (A), human ARP-1 transfected: sc-115650 (B) and mouse ARP-1 transfected: sc-126444 (C) 293T whole cell lysates. Detection reagent used: m-IgGλ BP-HRP: sc-516132.

ARP-1 (E-11): sc-271940. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing nuclear staining of cells in red pulp (B).

## SELECT PRODUCT CITATIONS

- Jiang, G., et al. 2019. Cooperativity of co-factor NR2F2 with pioneer factors GATA3, FOXA1 in promoting ERα function. *Theranostics* 9: 6501-6516.
- Fugazza, C., et al. 2021. The Coup-TFII orphan nuclear receptor is an activator of the γ-globin gene. *Haematologica* 106: 474-482.
- Xia, S., et al. 2021. Delta-like 4 is required for pulmonary vascular arborization and alveolarization in the developing lung. *JCI Insight* 6: e134170.

## 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.