

ARP-1 (T-19): sc-6578

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 (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ARP-1 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-6578 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-6578 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARP-1 (T-19) is recommended for detection of ARP-1 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).

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 (T-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ARP-1: 45 kDa.

Positive Controls: Ramos nuclear extract: sc-2153.

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.

SELECT PRODUCT CITATIONS

1. Eubank, D.W., et al. 2001. Peroxisome proliferator-activated receptor γ and chicken ovalbumin upstream promoter transcription factor II negatively regulate the phosphoenolpyruvate carboxykinase promoter via a common element. *J. Biol. Chem.* 276: 30561-30569.
2. Liberati, C., et al. 2001. Cooperation and competition between the binding of COUP-TFII and NF-Y on human ϵ - and γ -globin gene promoters. *J. Biol. Chem.* 276: 41700-41709.
3. Shibata, H., et al. 2001. Expression profiles of COUP-TF, DAX-1, and SF-1 in the human adrenal gland and adrenocortical tumors: possible implications in steroidogenesis. *Mol. Genet. Metab.* 74: 206-216.
4. Tanabe, O., et al. 2002. An embryonic/fetal β -type globin gene repressor contains a nuclear receptor TR2/TR4 heterodimer. *EMBO J.* 21: 3434-3442.
5. Takahashi, S., et al. 2002. Co-operation of the transcription factor hepatocyte nuclear factor-4 with Sp1 or Sp3 leads to transcriptional activation of the human haem oxygenase-1 gene promoter in a hepatoma cell line. *Biochem. J.* 367: 641-652.
6. Cabrero, A., et al. 2003. Down-regulation of acyl-CoA oxidase gene expression in heart of troglitazone-treated mice through a mechanism involving chicken Ovalbumin upstream promoter transcription factor II. *Mol. Pharmacol.* 64: 764-772.
7. Cabrero, A., et al. 2003. Down-regulation of acyl-CoA oxidase gene expression and increased NF κ B activity in etomoxir-induced cardiac hypertrophy. *J. Lipid Res.* 44: 388-398.
8. Selva, D.M. 2005. Repression of the human sex hormone-binding globulin gene in Sertoli cells by upstream stimulatory transcription factors. *J. Biol. Chem.* 280: 4462-4468.
9. Wu, X., et al. 2011. COUP-TFII switches responses of venous endothelium to atherosclerotic factors through controlling the profile of various inherent genes expression. *J. Cell. Biochem.* 112: 256-264.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **ARP-1 (E-11): sc-271940** or **ARP-1 (C-10): sc-393481**, our highly recommended monoclonal alternatives to ARP-1 (T-19).