SANTA CRUZ BIOTECHNOLOGY, INC.

ARP-1 (A-5): sc-393500

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.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 D_3 receptors. Cell 65: 1255-1266.
5. Cooney, A., et al. 1993. Multiple mechanisms of chicken ovalbumin upstream promoter transcription factor-dependent repression of transactivation by the vitamin D, thyroid hormone, and retinoic acid receptors. J. Biol. Chem. 268: 4152-4160.

CHROMOSOMAL LOCATION

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

SOURCE

ARP-1 (A-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 157-184 near the N-terminus of ARP-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chian 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-393500 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-393500 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

ARP-1 (A-5) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ARP-1 (A-5) is also recommended for detection of ARP-1 in additional species, including equine, canine, porcine and avian.

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 (A-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

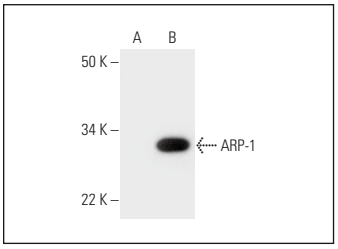
Molecular Weight of ARP-1: 45 kDa.

Positive Controls: ARP-1 (h): 293T Lysate: sc-111675.

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



ARP-1 (A-5): sc-393500. Western blot analysis of ARP-1 expression in non-transfected: sc-117752 (**A**) and human ARP-1 transfected: sc-111675 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Diling, C., et al. 2017. Docking studies and biological evaluation of a potential β-secretase inhibitor of 3-hydroxyhericenone F from *Hericium erinaceus*. Front. Pharmacol. 8: 219.

RESEARCH USE

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