

# ARA54 (B-10): sc-376701

## BACKGROUND

Androgens exhibit a wide range of effects on the development, maintenance and regulation of male phenotype and reproductive physiology in males. The androgen receptor (AR) is a member of the steroid superfamily of ligand-dependent transcription factors. ARs bind the two biologically active androgens, testosterone (T) and dihydrotestosterone (DHT). ARA54 contains a RING finger and functions as an AR coactivator. Testis, thymus, spleen, colon, prostate and uterus express ARA54 at high levels. ARA160 associates with an ATP-dependent chromatin remodeling factor known as the SNF/SWI complex. The FXXLF motif present in AR coactivators mediates their interaction with AR but not their transcription-related activity.

## REFERENCES

- Walsh, P.C., et al. 1974. Familial incomplete male pseudohermaphroditism type 2: decreased dihydrotestosterone formation in pseudovaginal perineoscrotal hypospadias. *N. Engl. J. Med.* 291: 944-949.
- Imperato-McGinley, J., et al. 1974. Steroid 5 $\alpha$ -reductase deficiency in man: an inherited form of male pseudohermaphroditism. *Science* 186: 1213-1215.
- Garcia, J.A., et al. 1992. Cloning and chromosomal mapping of a human immunodeficiency virus 1 "TATA" element modulatory factor. *Proc. Natl. Acad. Sci. USA* 89: 9372-9376.
- Zhou, Z.X., et al. 1994. The androgen receptor: an overview. *Recent Prog. Horm. Res.* 49: 249-274.

## CHROMOSOMAL LOCATION

Genetic locus: RNF14 (human) mapping to 5q31.3; Rnf14 (mouse) mapping to 18 B3.

## SOURCE

ARA54 (B-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-27 at the N-terminus of ARA54 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376701 X, 200  $\mu$ g/0.1 ml.

ARA54 (B-10) is available conjugated to agarose (sc-376701 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376701 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376701 PE), fluorescein (sc-376701 FITC), Alexa Fluor® 488 (sc-376701 AF488), Alexa Fluor® 546 (sc-376701 AF546), Alexa Fluor® 594 (sc-376701 AF594) or Alexa Fluor® 647 (sc-376701 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376701 AF680) or Alexa Fluor® 790 (sc-376701 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376701 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

ARA54 (B-10) is recommended for detection of ARA54 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

ARA54 (B-10) is also recommended for detection of ARA54 in additional species, including canine, bovine, porcine and avian.

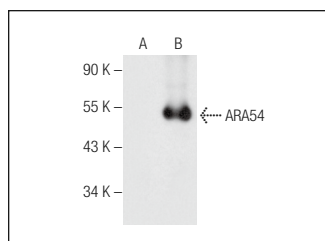
Suitable for use as control antibody for ARA54 siRNA (h): sc-43618, ARA54 siRNA (m): sc-44878, ARA54 shRNA Plasmid (h): sc-43618-SH, ARA54 shRNA Plasmid (m): sc-44878-SH, ARA54 shRNA (h) Lentiviral Particles: sc-43618-V and ARA54 shRNA (m) Lentiviral Particles: sc-44878-V.

ARA54 (B-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

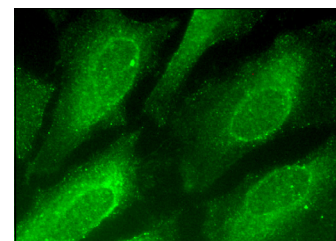
Molecular Weight of ARA54: 54 kDa.

Positive Controls: DU 145 cell lysate: sc-2268 or ARA54 (m): 293T Lysate: sc-123234.

## DATA



ARA54 (B-10): sc-376701. Western blot analysis of ARA54 expression in non-transfected: sc-117752 (A) and mouse ARA54 transfected: sc-123234 (B) 293T whole cell lysates.



ARA54 (B-10): sc-376701. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

## SELECT PRODUCT CITATIONS

- Oltion, K., et al. 2023. An E3 ligase network engages GCN1 to promote the degradation of translation factors on stalled ribosomes. *Cell* 186: 346-362.e17.

## 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.