

# ARA54 (G-8): sc-271227

## 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 dihydro-testosterone 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.
- Kang, H.Y., et al. 1999. Cloning and characterization of human prostate co-activator ARA54, a novel protein that associates with the androgen receptor. *J. Biol. Chem.* 274: 8570-8576.
- Ueki, N., et al. 1999. Isolation and characterization of a novel human gene (HFB30) which encodes a protein with a RING finger motif. *Biochim. Biophys. Acta* 1445: 232-236.
- He, B., et al. 2002. The FXXLF motif mediates androgen receptor-specific interactions with coregulators. *J. Biol. Chem.* 277: 10226-10235.
- Mori, K., and Kato, H. 2002. A putative nuclear receptor coactivator (TMF/ARA160) associates with hbrm/hSNF2  $\alpha$  and BRG-1/hSNF2  $\beta$  and localizes in the Golgi apparatus. *FEBS Lett.* 520: 127-132.

## CHROMOSOMAL LOCATION

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

## SOURCE

ARA54 (G-8) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of ARA54 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2b</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-271227 X, 200  $\mu$ g/0.1 ml.

## APPLICATIONS

ARA54 (G-8) 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).

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 (G-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

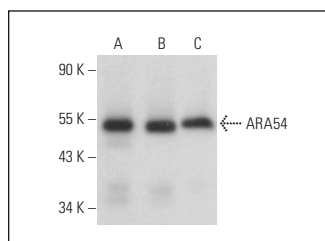
Molecular Weight of ARA54: 54 kDa.

Positive Controls: DU 145 cell lysate: sc-2268, Neuro-2A whole cell lysate: sc-364185 or HeLa whole cell lysate: sc-2200.

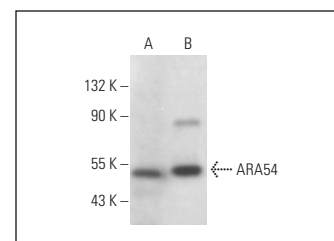
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



ARA54 (G-8): sc-271227. Western blot analysis of ARA54 expression in HeLa (A) and SK-BR-3 (B) whole cell lysates and rat brain tissue extract (C).



ARA54 (G-8): sc-271227. Western blot analysis of ARA54 expression in DU 145 (A) and Neuro-2A (B) whole cell lysates.

## 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.