

AR (G-13): sc-109500

BACKGROUND

Androgens exhibit a wide range of effects on the development, maintenance and regulation of male phenotype and male reproductive physiology. 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), with high and nearly identical affinities; however, the rates of association and dissociation of T are about three times more rapid than those of DHT. This difference has resulted in speculation as to whether these differences in binding kinetics could account for the different physiological effects of T and DHT. A striking feature of AR is its rapid degradation in the absence of ligand. It is now well established that androgen binding results in an at least six-fold increase in androgen stability and that ligand-induced stabilization of AR is highly androgen-specific.

REFERENCES

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- Imperato-McGinley, J., et al. 1974. Steroid 5 α -reductase deficiency in man: an inherited form of male pseudohermaphroditism. *Science* 186: 1213-1215.
- Wilson, E.M., et al. 1976. Binding properties of androgen receptors: evidence for identical receptors in rat testis, epididymis and prostate. *J. Biol. Chem.* 251: 5620-5629.
- Grino, P.B., et al. 1990. Testosterone at high concentrations interacts with the human androgen receptor similarly to dihydro-testosterone. *Endocrinology* 126: 1165-1172.
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- Zhou, Z.X., et al. 1994. The androgen receptor: an overview. *Recent Prog. Horm. Res.* 49: 249-274.

CHROMOSOMAL LOCATION

Genetic locus: AR (human) mapping to Xq12; Ar (mouse) mapping to X C3.

SOURCE

AR (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of AR of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109500 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

AR (G-13) is recommended for detection of AR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for AR siRNA (h): sc-29204, AR siRNA (m): sc-29203, AR shRNA Plasmid (h): sc-29204-SH, AR shRNA Plasmid (m): sc-29203-SH, AR shRNA (h) Lentiviral Particles: sc-29204-V and AR shRNA (m) Lentiviral Particles: sc-29203-V.

Molecular Weight of AR: 110/87 kDa.

Positive Controls: ZR-75-1 cell lysate: sc-2241, T-47D cell lysate: sc-2293 or MCF7 whole cell lysate: sc-2206.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



AR (G-13): sc-109500. Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing cytoplasmic and nuclear staining of glandular cells.

STORAGE

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

MONOS
Satisfaction
Guaranteed

Try **AR (441): sc-7305** or **AR (F39.4.1): sc-52309**, our highly recommended monoclonal alternatives to AR (G-13). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **AR (441): sc-7305**.