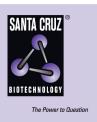
SANTA CRUZ BIOTECHNOLOGY, INC.

p-AR (Ser 213): sc-135635



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 liganddependent transcription factors. ARs bind active testosterone (T) and dihydrotestosterone (DHT). The rates of association and dissociation of T are about three times more rapid than those of DHT. This difference in binding kinetics may account for the different physiological effects of T and DHT. Androgen binding results in an at least six-fold increase in androgen receptor stability. Akt phosphorylates human AR at Serine residues 210 and 790. The synthetic androgen R1881 elevates phosphorylation of Serine residues 308 and 650 *in vitro*.

REFERENCES

- Walsh, P.C., Madden, J.D., Harrod, M.J., Goldstein, J.L., MacDonald, P.C. and Wilson, J.D. 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., Guerrero, L., Gautier, T. and Peterson, R.E. 1974. Steroid 5a-reductase deficiency in man: an inherited form of male pseudohermaphroditism. Science 186: 1213-1215.
- Wilson, E.M. and French, F.S. 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., Griffin, J.E. and Wilson, J.D. 1990. Testosterone at high concentrations interacts with the human androgen receptor similarly to dihydro-testosterone. Endocrinology 126: 1165-1172.
- Kemppainen, J.A., Lane, M.V., Sar, M. and Wilson, E.M. 1992. Androgen receptor phosphorylation, turnover, nuclear transport and transcriptional activation: specificity for steroids and antihormones. J. Biol. Chem. 267: 968-974.
- Zhou, Z.X., Wong, C.I., Sar, M. and Wilson, E.M. 1994. The androgen receptor: an overview. Recent Prog. Horm. Res. 49: 249-274.
- Zhou, Z.X., Lane, M.V., Kemppainen, J.A., French, F.S. and Wilson, E.M. 1995. Specificity of ligand-dependent androgen receptor stabilization: receptor domain interactions influence ligand dissociation and receptor stability. Mol. Endocrinol. 9: 208-218.

CHROMOSOMAL LOCATION

Genetic locus: AR (human) mapping to Xq12.

SOURCE

p-AR (Ser 213) is a rabbit polyclonal antibody raised against a short amino acid sequence containing Ser 213 phosphorylated AR of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

p-AR (Ser 213) is recommended for detection of Ser 213 phosphorylated Androgen Receptor of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

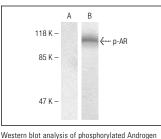
Suitable for use as control antibody for AR siRNA (h): sc-29204, AR shRNA Plasmid (h): sc-29204-SH and AR shRNA (h) Lentiviral Particles: sc-29204-V.

Molecular Weight of p-AR: 110/87 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Western Blotting Luminol Reagent: sc-2048 and Lambda Phosphatase: sc-2003(0.5 ml agarose/2.0 ml).

DATA



Receptor expression in DU 145 cell extracts. Blots were probed with p-AR (Ser 210): sc-135635 preincubated with cognate phosphorylated peptide (**A**) and p-AR (Ser 210): sc-135635 (**B**).

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.

MONOS Satisfation Guaranteed

Try **p-AR (156C135.2): sc-52894** or **p-AR (4H24): sc-71773**, our highly recommended monoclonal aternatives to p-AR (Ser 213).