SANTA CRUZ BIOTECHNOLOGY, INC.

AR (C-19): sc-815

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Androgens exhibit a wide range of effects on the development, maintenance and regulation of male phenotype and make 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.

CHROMOSOMAL LOCATION

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

SOURCE

AR (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of AR of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-815 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-815 X, 200 µg/0.1 ml; as HRP conjugate for Western blotting, sc-815 HRP, 200 µg/1 ml; and as fluorescein (sc-815 FITC) or rhodamine (sc-815 TRITC) conjugates for immunofluorescence, 200 µg/1 ml.

APPLICATIONS

AR (C-19) is recommended for detection of androgen receptor of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), 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).

AR (C-19) is also recommended for detection of AR in additional species, including equine, canine, bovine, porcine and avian.

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.

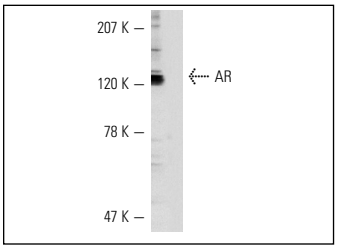
AR (C-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of AR: 110 kDa.

STORAGE

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

DATA



AR (C-19): sc-815. Western blot analysis of AR expression in LNCaP whole cell lysate.

SELECT PRODUCT CITATIONS

1. Liao, D.Z., et al. 1998. Promotion of estrogen-induced mammary gland carcinogenesis by androgen in the male Noble rat: probable mediation by steroid receptors. Carcinogenesis 19: 2173-2180.
2. Li, M., et al. 1998. Nonneural nuclear inclusions of androgen receptor protein in spinal and bulbar muscular atrophy. Am. J. Pathol. 153: 695-701.
3. Shiota, M., et al. 2010. Peroxisome proliferator-activated receptor γ coactivator-1α interacts with the androgen receptor (AR) and promotes prostate cancer cell growth by activating the AR. Mol. Endocrinol. 24: 114-127.
4. Terada, N., et al. 2010. Identification of EP4 as a potential target for the treatment of castration-resistant prostate cancer using a novel xenograft model. Cancer Res. 70: 1606-1615.
5. Yokomizo, A., et al. 2011. Statins reduce the androgen sensitivity and cell proliferation by decreasing the androgen receptor protein in prostate cancer cells. Prostate 71: 298-304.
6. Shiota, M., et al. 2011. Peroxiredoxin 2 in the nucleus and cytoplasm distinctly regulates androgen receptor activity in prostate cancer cells. Free Radic. Biol. Med. 51: 78-87.
7. Chen, P.J., et al. 2012. The androgen pathway stimulates microRNA-216a transcription to suppress the TSLC1 tumor suppressor gene in early hepatocarcinogenesis. Hepatology 56: 632-643.

RESEARCH USE

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