PRODUCT INFORMATION



Androgen Receptor (Phospho-Ser^{210,213}) Monoclonal Antibody (Clone 156C135.2)

Item No. 13492

Overview and Properties

Contents: This vial contains 100 µl of protein G-affinity purified monoclonal antibody.

AR, NR3C4, Nuclear Receptor Subfamily 3 Group C Member 4 Synonyms:

Immunogen: Synthetic peptide from human androgen receptor amino acids 207-221

Species Reactivity: (+) Human and monkey androgen receptor

Form: Liquid

-20°C (as supplied) Storage:

Stability: ≥1 year

Storage Buffer: PBS, with 0.05% BSA and 0.05% sodium azide

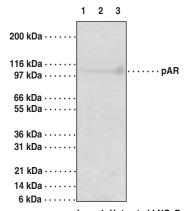
Concentration: 1 mg/ml Clone: 156C135.2 Host: Mouse IgG1ĸ Isotype:

Applications: Immunohistochemistry (IHC) (paraffin-embedded) and Western blot (WB); the

> recommended starting dilution is 1:10-1:500 for IHC and 1-4 μ g/ml for WB. Other applications were not tested, therefore optimal working concentration/dilution should

be determined empirically.

Image



Lane 1: Untreated LNCaP cells Lane 2: Treated LNCaP cells

Lane 3: LY294002

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

The androgen receptor (AR) is an ~100 kDa androgen-dependent transcription factor that is a member of the steroid/nuclear receptor gene superfamily. The AR signaling pathway plays a key role in development and function of male reproductive organs, including the prostate and epididymis. AR also plays a role in nonreproductive organs, such as muscle, hair follicles, and brain. Abnormalities in the AR signaling pathway have been linked to a number of diseases, including prostate cancer, Kennedy's disease, and male infertility. The phosphatidylinositol 3-kinase (PI3K)/Akt signaling pathway plays an important role in regulating AR activity through phosphorylation of AR at Ser^{213/210} and Ser^{791/790}. Growth factors or cytokines may induce phosphorylation of AR through the PI3K/Akt pathway. IGF-1 activates the PI3K/AKT pathway in LNCap at high passage number and increases phosphorylation of the AR at Ser^{213/210} and Ser^{791/790}.¹ The western blot results also show that inhibition of the PI3K/Akt pathway by LY294002 prior to incubation with IGF-1 suppressed AR phosphorylation at Ser^{213/210}. Activation of the PI3K/Akt pathway is thought to have a survival role in prostate cancer by protecting cells from apoptosis.

Reference

1. Lin, H.K., Hu, Y.C., Yang, L., *et al.* Suppression *versus* induction of androgen receptor functions by the phosphatidylinositol 3-kinase/Akt pathway in prostate cancer LNCaP cells with different passage numbers. *J. Biol. Chem.* **278**(**51**), 50902-50907 (2003).

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