

## OriGene Technologies, Inc.

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## **Product datasheet for TA336428**

Androgen Receptor (AR) Mouse Monoclonal Antibody [Clone ID: 156C135.2]

**Product data:** 

**Product Type:** Primary Antibodies

**Clone Name:** 156C135.2

Applications: WB

**Recommend Dilution:** WB: 1-4 ug/ml, IHC: 1:10-1:500, IHC-P: 1:10-1:500

Reactivity: Human, Primate

**Host:** Mouse

Isotype: IgG1, kappa
Clonality: Monoclonal

**Immunogen:** This antibody was developed against a synthetic peptide corresponding to amino acids 207-

221 (GRAREAS\*GAPTSSKD) of human androgen receptor, containing the serine 213

phosphorylation site: GenBank Accession No. A39248. Note: S\* refers to phosphorylated se

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

**Concentration:** 0.5 mg/ml

Purification: Protein G purified

Gene Name: androgen receptor

Database Link: NP 000035 Entrez Gene 367 Human



Background:

The androgen receptor (AR) is an approx. 110 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 PI3K/Akt signaling pathway plays an important role in regulating AR activity through phosphorylation of AR at Ser213/210 and Ser791/790. Growth factors or cytokines may induce phosphorylation of AR through the PI3K/Akt pathway. IGF-1 activates the phosphatidylinositol 3-kinase(PI3K)/AKT pathway in LNCap at high passage number and increases phosphorylation of of AR at Ser213/210 (see western blot) and Ser791/790 (Lin et al. 2003). 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 Ser213/210. Activation of the PI3K/AKt pathway is thought to have a survival role in prostate cancer by protecting cells from apoptosis.

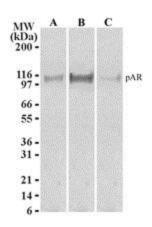
Synonyms: AIS; AR8; DHTR; HUMARA; HYSP1; KD; NR3C4; SBMA; SMAX1; TFM

**Note:** Immunohistochemistry-Paraffin reported in literature (Lin et al, 2007).

**Protein Families:** Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

**Protein Pathways:** Oocyte meiosis, Pathways in cancer, Prostate cancer

## **Product images:**



Western Blot: Androgen Receptor [p Ser213, p Ser210] Antibody (156C135.2) TA336428 - LNCaP cells (passage number 38) were serum-starved for 2 days. After serum starvation, cells were (A) left untreated, (B) treated with 100 ng/ml IGF-1 for 4h, or &