

## Product datasheet

# Anti-Androgen Receptor antibody [EP670Y] ab52615

Recombinant RabMAb

★★★★☆ [5 Abreviews](#) [26 References](#) [6 Images](#)

### Overview

<b>Product name</b>	Anti-Androgen Receptor antibody [EP670Y]
<b>Description</b>	Rabbit monoclonal [EP670Y] to Androgen Receptor
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human Androgen Receptor aa 900 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: <a href="#">P10275</a> (Peptide available as <a href="#">ab174742</a> )
<b>Positive control</b>	WB: LnCaP and 22Rv1 cell lysate and mouse and rat testis tissue lysates.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

**Clone number** EP670Y  
**Isotype** IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab52615 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 99 kDa. <b>We recommend to use 1% SDS Hot lysis prepare method.</b>

**Application notes** Is unsuitable for Flow Cyt, ICC/IF or IHC-P.

## Target

**Function** Steroid hormone receptors are ligand-activated transcription factors that regulate eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Transcription factor activity is modulated by bound coactivator and corepressor proteins. Transcription activation is down-regulated by NR0B2. Activated, but not phosphorylated, by HIPK3 and ZIPK/DAPK3. Isoform 3 and isoform 4 lack the C-terminal ligand-binding domain and may therefore constitutively activate the transcription of a specific set of genes independently of steroid hormones.

**Tissue specificity** Isoform 2 is mainly expressed in heart and skeletal muscle (PubMed:15634333). Isoform 3 is expressed by basal and stromal cells of prostate (at protein level) (PubMed:19244107).

**Involvement in disease** Androgen insensitivity syndrome  
Spinal and bulbar muscular atrophy X-linked 1  
Defects in AR may play a role in metastatic prostate cancer. The mutated receptor stimulates prostate growth and metastases development despite of androgen ablation. This treatment can reduce primary and metastatic lesions probably by inducing apoptosis of tumor cells when they express the wild-type receptor.  
Androgen insensitivity, partial

**Sequence similarities** Belongs to the nuclear hormone receptor family. NR3 subfamily.  
Contains 1 nuclear receptor DNA-binding domain.

**Domain** Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain. In the presence of bound steroid the ligand-binding domain interacts with the N-terminal modulating domain, and thereby activates AR transcription factor activity. Agonist binding is required for dimerization and binding to target DNA. The transcription factor activity of the complex formed by ligand-activated AR and DNA is modulated by interactions with coactivator and corepressor proteins. Interaction with RANBP9 is mediated by both the N-terminal domain and the DNA-binding domain. Interaction with EFCAB6/DJBP is mediated by the DNA-binding domain.

**Post-translational modifications** Sumoylated on Lys-388 (major) and Lys-521. Ubiquitinated. Deubiquitinated by USP26. 'Lys-6' and 'Lys-27'-linked polyubiquitination by RNF6 modulates AR transcriptional activity and specificity.  
Phosphorylated in prostate cancer cells in response to several growth factors including EGF. Phosphorylation is induced by c-Src kinase (CSK). Tyr-535 is one of the major phosphorylation

sites and an increase in phosphorylation and Src kinase activity is associated with prostate cancer progression. Phosphorylation by TNK2 enhances the DNA-binding and transcriptional activity and may be responsible for androgen-independent progression of prostate cancer. Phosphorylation at Ser-83 by CDK9 regulates AR promoter selectivity and cell growth. Phosphorylation by PAK6 leads to AR-mediated transcription inhibition. Palmitoylated by ZDHHC7 and ZDHHC21. Palmitoylation is required for plasma membrane targeting and for rapid intracellular signaling via ERK and AKT kinases and cAMP generation.

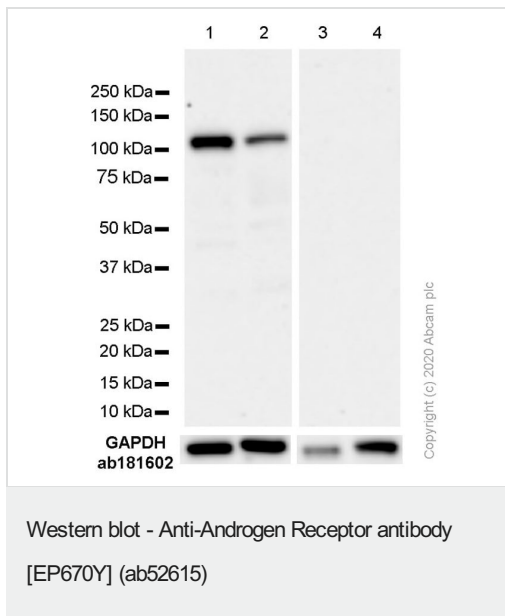
## Cellular localization

Nucleus. Cytoplasm. Predominantly cytoplasmic in unligated form but translocates to the nucleus upon ligand-binding. Can also translocate to the nucleus in unligated form in the presence of RACK1.

## Form

There are 2 isoforms produced by alternative splicing. Isoform 1 is also known as: AR-B; isoform 2 is known as AR-A or variant AR45.

## Images



**All lanes :** Anti-Androgen Receptor antibody [EP670Y] (ab52615) at 1/1000 dilution

**Lane 1 :** Mouse testis lysate

**Lane 2 :** Rat testis lysate

**Lane 3 :** Mouse liver lysate

**Lane 4 :** Rat liver lysate

Lysates/proteins at 20 µg per lane.

## Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

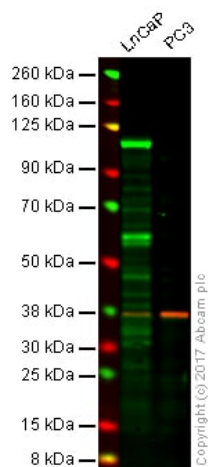
**Predicted band size:** 99 kDa

**Observed band size:** 110 kDa

**Exposure time:** 1 minute

**Blocking/Diluting buffer:** 5% NFDM/TBST

**Loading control:** Rabbit monoclonal [EPR16891] to GAPDH ([ab181602](#))



Western blot - Anti-Androgen Receptor antibody [EP670Y] (ab52615)

**All lanes** : Anti-Androgen Receptor antibody [EP670Y] (ab52615) at 1/1000 dilution

**Lane 1** : LnCAP whole cell lysate (positive control)

**Lane 2** : PC3 whole cell lysate (negative control)

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Performed under reducing conditions.

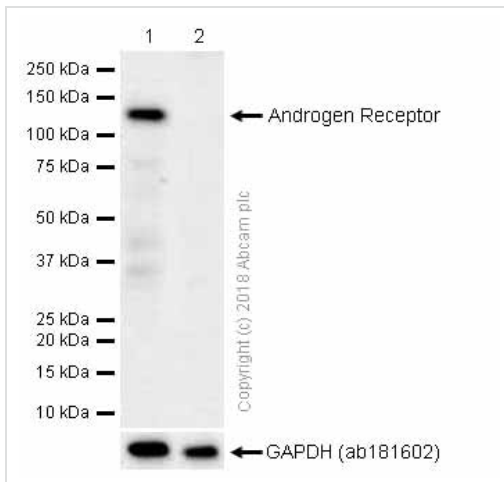
**Predicted band size:** 99 kDa

**Observed band size:** 120 kDa

**Additional bands at:** 58 kDa. We are unsure as to the identity of these extra bands.

Lanes 1 - 2: Merged signal (red and green). Green - ab52615 observed at 120 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using Licor blocking buffer before being incubated with ab52615 and [ab8245](#) (loading control) overnight at 4°C. Antibody binding was detected using Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) at a 1:10000 dilution for 1hr at room temperature and then imaged.



Western blot - Anti-Androgen Receptor antibody [EP670Y] (ab52615)

**All lanes :** Anti-Androgen Receptor antibody [EP670Y] (ab52615) at 1/5000 dilution (Purified)

**Lane 1 :** 22Rv1 (Human prostate carcinoma epithelial cell) whole cell lysates prepared in 1%SDS Hot lysis method with 5% NFDm/TBST

**Lane 2 :** 22Rv1 (Human prostate carcinoma epithelial cell) whole cell lysates prepared in RIPA lysis method with 5% NFDm/TBST

Lysates/proteins at 15 µg per lane.

**Secondary**

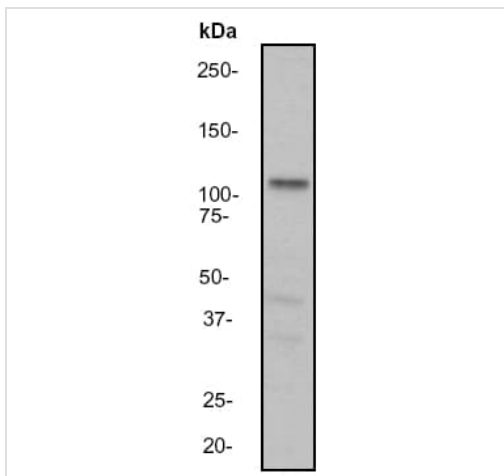
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 99 kDa

**Observed band size:** 110 kDa

**Exposure time:** 3 minutes

This antibody works better in 1%SDS Hot Lysates in WB. For Lysate preparation protocol, please refer to the protocol [here](#) (**downloadable copy**).



Western blot - Anti-Androgen Receptor antibody [EP670Y] (ab52615)

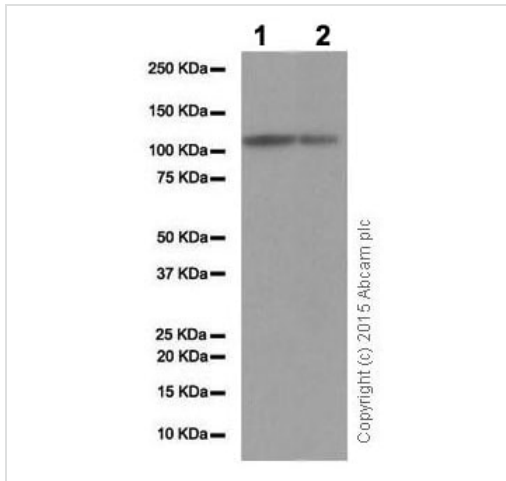
Anti-Androgen Receptor antibody [EP670Y] (ab52615) at 1/10000 dilution (unpurified) + LnCaP cell lysate at 10 µg

**Secondary**

HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

**Predicted band size:** 99 kDa

**Observed band size:** 99 kDa



Western blot - Anti-Androgen Receptor antibody [EP670Y] (ab52615)

**All lanes :** Anti-Androgen Receptor antibody [EP670Y] (ab52615) at 1/2000 dilution (purified)

**Lane 1 :** Mouse testis tissue lysate

**Lane 2 :** Rat testis tissue lysate

Lysates/proteins at 10 µg per lane.

**Secondary**





**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

**Predicted band size:** 99 kDa

**Observed band size:** 110 kDa

Blocking and dilution buffer: 5% NFDm/TBST.

Why choose a recombinant antibody?

 <b>Research with confidence</b> Consistent and reproducible results	 <b>Long-term and scalable supply</b> Recombinant technology
 <b>Success from the first experiment</b> Confirmed specificity	 <b>Ethical standards compliant</b> Animal-free production

Anti-Androgen Receptor antibody [EP670Y] (ab52615)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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