abcam

Product datasheet

Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade ab108341

重组 RabMAb

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概述

产品名称	Anti-Androgen Receptor抗体[ER179(2)] - ChIP Grade
描述	兔单克隆抗体[ER179(2)] to Androgen Receptor - ChIP Grade
宿主	Rabbit
经测试应用	**适用于:** ChIC/CUT&RUN-seq, ICC/IF, WB, IHC-P, ChIP **不适用于:** Flow Cyt or IP
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Mouse and Rat testis lysates, Human LNCaP, 22Rv1, T47 D and LnCaP whole cell lysates. IHC: Mouse testis, Human testis, breast carcinoma, prostatic carcinoma and normal testis tissue. ICC/IF: Human LnCaP cells ChIC/CUT&RUN seq: LNCaP cell.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid
存放说明	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.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
纯度	Protein A purified

克隆	单克隆
克隆编号	ER179(2)
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab108341于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ChIC/CUT&RUN-seq		Use at an assay dependent concentration.
ICC/IF	★★★★☆ (1)	1/500. **For unpurified use at 1/100 - 1/250.**
WB	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 99 kDa. For Lysate preparation protocol, please refer to the protocol book in the protocol section and/or **here (downloadable copy).**
IHC-P		1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. **For unpurified use at 1/250 - 1/500.** Perform heat mediated antigen retrieval with citrate buffer (pH 6.0) or Tris-EDTA buffer (pH9.0) before commencing with IHC staining protocol.
ChIP		Use at an assay dependent concentration. PubMed: 23817021

应用说明 Is unsuitable for Flow Cyt or IP.

靶标

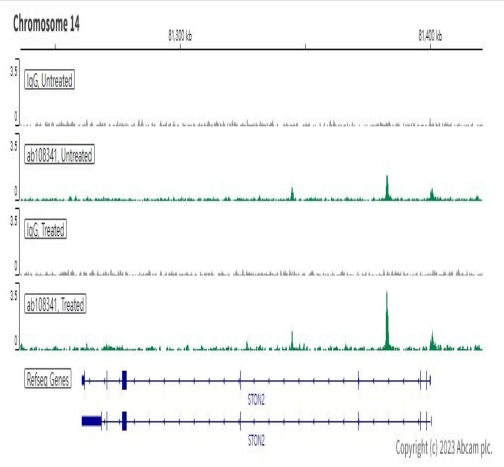
功能 Steroid hormone receptors are ligand-activated transcription factors that regulate eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Transcription factor activity is modulated by bound coactivator and corepressor proteins. Transcription activation 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.

组织特异性 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).

疾病相关 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

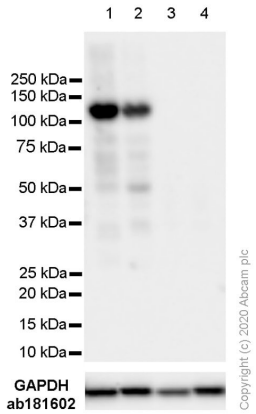
序列相似性	Belongs to the nuclear hormone receptor family. NR3 subfamily. Contains 1 nuclear receptor DNA-binding domain.
结构域	Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain. In the presence of bound steroid the ligand-binding domain interacts 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.
翻译后修饰	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.
细胞定位	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.
形式	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.

图片



ChIC/CUT&RUN sequencing - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

ChIC/CUT&RUN was performed using a pAG-MNAse at a final concentration of 700 ng/µL, 2.5 x 10^5 LNCaP (Human prostate carcinoma epithelial cell) cells cultured in phenol red free medium and 5% charcoal stripped FBS for 3 days then treated with DHT (10 nM 4h), and 5 µg of ab108341 [ER179(2)]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control **ab172730** is also shown.
Additional screenshots of mapped reads can be downloaded **here**.
The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



Western blot - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

All lanes : Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341) at 1/1000 dilution

Lane 1 : Mouse testis lysates
Lane 2 : Rat testis lysates
Lane 3 : Mouse liver lysates
Lane 4 : Rat liver lysates

Lysates/proteins at 20 µg per lane.

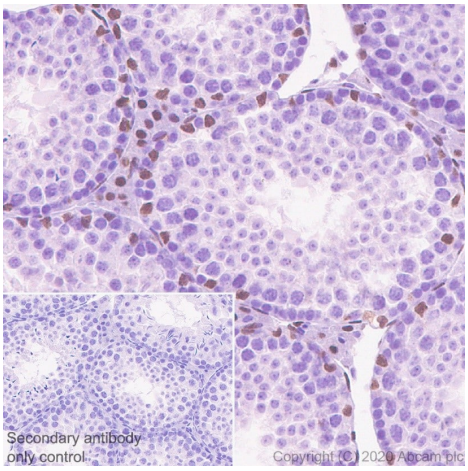
Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/20000 dilution

Predicted band size: 99 kDa

Exposure time: 20 seconds

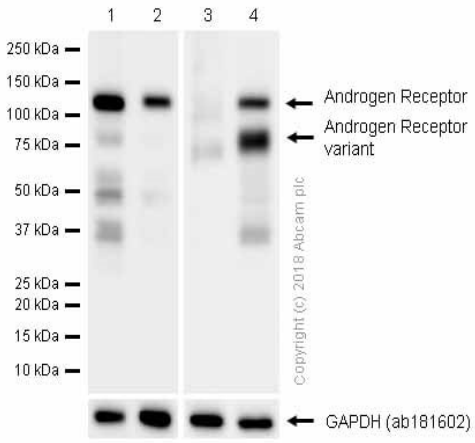
Blocking/Diluting buffer and concentration: 5% NFDM/TBST

Observed MW; 110 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Immunohistochemistry (paraffin-embedded sections) analysis of mouse testis tissue labelling Androgen with ab108341 at 0.12 µg/mL for 30mins at room temperature. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9 epitope retrieval solution 2) for 20 mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody (1/4000). Counterstained with hematoxylin. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument.



Western blot - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

All lanes : Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341) at 1/5000 dilution

Lane 1 : LNCaP (Human prostate carcinoma epithelial cell) whole cell lysates prepared in RIPA lysis method
Lane 2 : LNCaP (Human prostate carcinoma epithelial cell) whole cell lysates prepared in 1%SDS Hot lysis method
Lane 3 : 22Rv1 (Human prostate carcinoma epithelial cell) whole cell lysates prepared in RIPA lysis method
Lane 4 : 22Rv1 (Human prostate carcinoma epithelial cell) whole cell lysates prepared in 1%SDS Hot lysis method

Lysates/proteins at 15 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

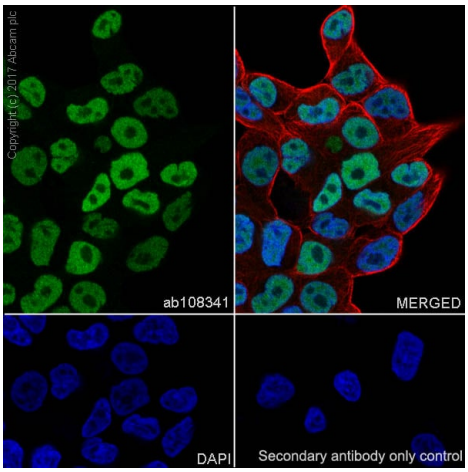
Predicted band size: 99 kDa
Observed band size: 120 kDa

Exposure time: 20 seconds

Blocking/Diluting buffer: 5% NFDM/TBST

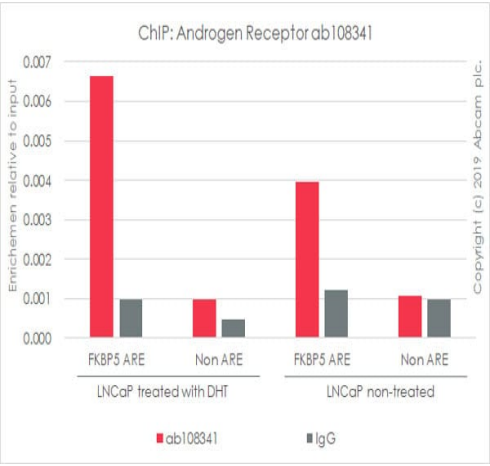
The androgen receptor variant band detected in 22RV1 cells is reported by PMID: 22315407.

We recommend you to try both RIPA and 1% SDS Hot lysis preparation methods to get desired bands.



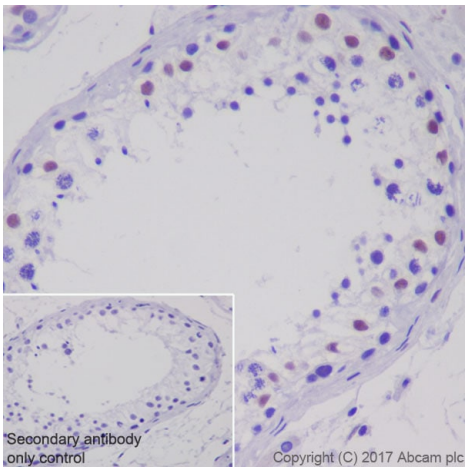
Immunocytochemistry/ Immunofluorescence - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Immunocytochemistry/ Immunofluorescence analysis of LNCaP (Human prostate carcinoma epithelial cell) cells labeling Androgen receptor with Purified ab108341 at 1:500 dilution. Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor ® 594) 1:200 (2.5 µg/ml). **ab150077** Goat anti rabbit IgG(Alexa Fluor ® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



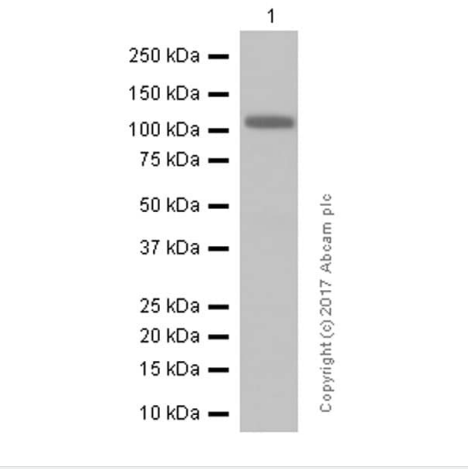
ChIP - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Chromatin was prepared from LNCaP cells according to the Abcam Dual-X-ChIP protocol*. Cells were fixed with 1.5 mM EGS for 30mins and then formaldehyde for 10min.
The ChIP was performed with 25 µg of chromatin, 5 µg of ab108341 (red), or 5 µg of rabbit normal IgG **ab172730** (gray) and 20 µl of Protein A/G sepharose beads. The immunoprecipitated DNA was quantified by real time PCR (Taqman approach for active and inactive loci, Sybr green approach for heterochromatic loci). Primers and probes are commercial primers from Paper (PMID: 25802280)
*http://www.abcam.com/resources?keywords=X%20ChIP%20protocol



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human testis tissue sections labeling Androgen receptor with Purified ab108341 at 1:100 dilution. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

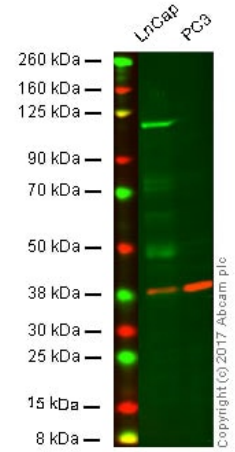
Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341) at 1/5000 dilution (purified) + LNCaP (Human prostate carcinoma epithelial cell) whole cell lysates at 15 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 99 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

All lanes : Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341) at 1/1000 dilution (unpurified)

Lane 1 : LnCAP whole cell lysate (positive control)
Lane 2 : PC3 whole cell lysate (negative control)

Lysates/proteins at 20 µg per lane.

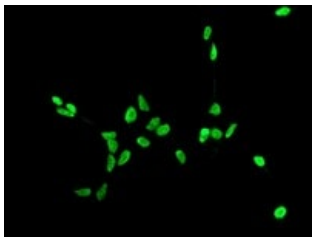
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (**ab216777**) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 99 kDa
Observed band size: 120 kDa

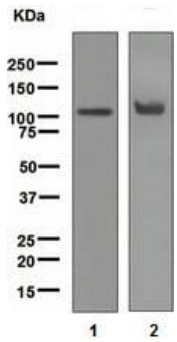
Lanes 1 - 2: Merged signal (red and green). Green - ab108341 observed at 120 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

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 ab108341 and **ab181602** (loading control) overnight at 4°C. Antibody binding was detected using Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (**ab216777**) at a 1:10000 dilution for 1hr at room temperature and then imaged.



Immunocytochemistry/ Immunofluorescence - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Unpurified **ab108341**, at 1/100, staining Androgen Receptor in LnCaP cells by Immunofluorescence.



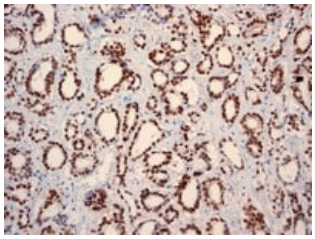
Western blot - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

All lanes : Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341) at 1/1000 dilution (unpurified)

Lane 1 : T47 D cell lysate
Lane 2 : LnCaP cell lysate

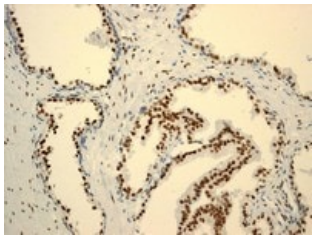
Lysates/proteins at 10 µg per lane.

Predicted band size: 99 kDa



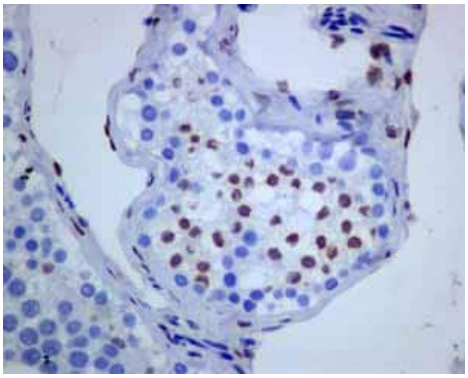
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Unpurified **ab108341**, at 1/250, staining Androgen Receptor in paraffin-embedded Human prostatic adenocarcinoma tissue by Immunohistochemistry. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



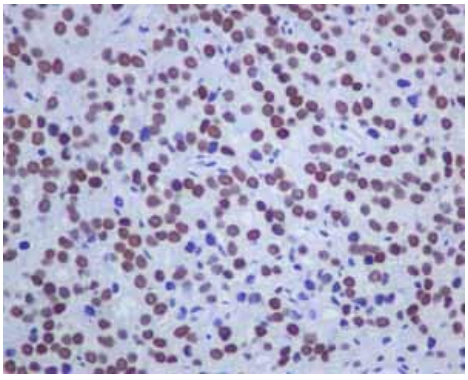
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Unpurified **ab108341**, at 1/250, staining Androgen Receptor in paraffin-embedded Human prostate tissue by Immunohistochemistry. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



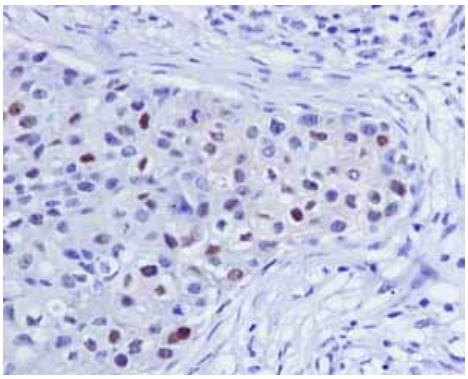
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Unpurified **ab108341** showing positive staining in Normal testis tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



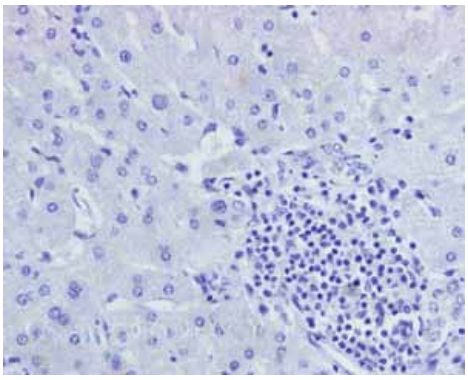
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Unpurified **ab108341** showing positive staining in Prostatic carcinoma T3 tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



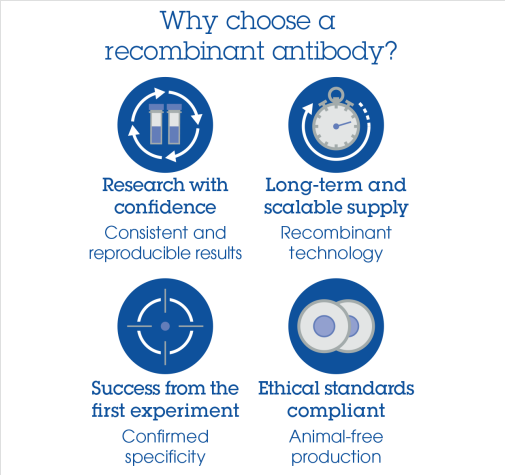
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Unpurified **ab108341** showing positive staining in Breast carcinoma tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

Unpurified **ab108341** showing negative staining in Normal liver tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Anti-Androgen Receptor antibody [ER179(2)] - ChIP Grade (ab108341)

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