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antibody and ELISA experts

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Anti-Androgen Receptor/AR Antibody Picoband®

Catalog Number: A00542

About AR

The AR (androgen receptor) gene is more than 90 kb long and codes for a protein that has 3 major functional domains: the N-terminal domain, DNA-binding domain, and androgen-binding domain. The AR gene is mapped to Xq12. The protein functions as a steroid-hormone activated transcription factor. Upon binding the hormone ligand, the receptor dissociates from accessory proteins, translocates into the nucleus, dimerizes, and then stimulates transcription of androgen responsive genes. This gene contains 2 polymorphic trinucleotide repeat segments that encode polyglutamine and polyglycine tracts in the N-terminal transactivation domain of its protein. Expansion of the polyglutamine tract causes spinal bulbar muscular atrophy (Kennedy disease). Mutations in this gene are also associated with complete androgen insensitivity (CAIS). Two alternatively spliced variants encoding distinct isoforms have been described.

Overview

Product Name	Anti-Androgen Receptor/AR Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Androgen Receptor/AR Antibody Picoband® catalog # A00542. Tested in ELISA, Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P10275

Technical Details

Immunogen	E.coli-derived human Androgen Receptor/AR recombinant protein (Position: A629-Q920).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

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Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.25ug/ml, Human Immunocytochemistry/Immunofluorescence, 5ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10^6 cells, Human, Mouse, Rat ELISA, 0.1-0.5ug/ml, -

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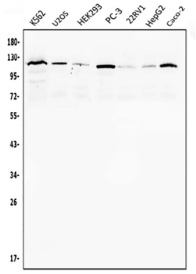
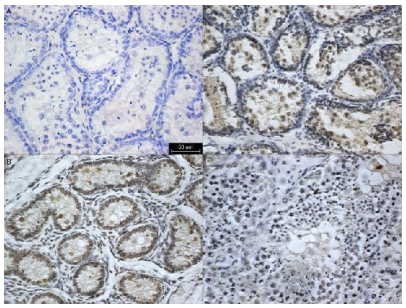
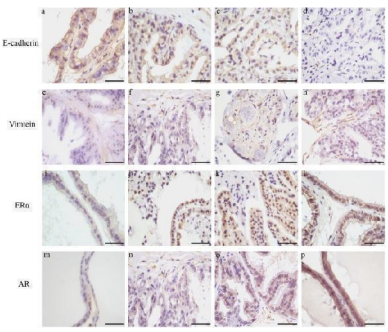
Anti-Androgen Receptor/AR Antibody Picoband® (A00542) Images



Western blot analysis of Androgen Receptor/AR using anti-Androgen Receptor/AR antibody (A00542). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human K562 whole cell lysates, Lane 2: human U20S whole cell lysates, Lane 3: human HEK293 whole cell lysates, Lane 4: human PC-3 whole cell lysates, Lane 5: human 22RV1 whole cell lysates, Lane 6: human HepG2 whole cell lysates, Lane 7: human CACO-2 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Androgen Receptor/AR antigen affinity purified polyclonal antibody (Catalog # A00542) at 0.25 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Androgen Receptor/AR at approximately 120KD. The expected band size for Androgen Receptor/AR is at 120KD.



Immuno-expression of AR (A:3.5yr.) and ERbeta (B: 0.1yr., C: 3.5yr. and D: 8yr.) in testes. Scale bar = 50 um.Index in PubMed under a CC BY license. PMID: 31966281



Immunohistochemical analysis of dorsolateral prostate E-cadherin, Vimtein, ERalpha and AR expression in aged rats. The expression of vimentin, ERalpha and AR increased, and the expression of E-cadherin decreased in BPA-treated groups. (a – p) Representative sections of comparable regions are shown for vehicle control rats (a , e , i , m), and animals exposed to BPA (10 ug/kg/day) (b , f , j , n), BPA (30 ug /kg/day) (c , g , k , o), and BPA (90 ug/kg/day) (d , h , l , p) (scale bar: 50 um, ×400). BPA: bisphenol A; AR: androgen receptor; ERalpha:estrogen receptor-alpha. Index in PubMed under a CC BY license. PMID: 29323181

Immunohistochemical analysis of PCNA in DLP. Representative sections of comparable regions were shown for vehicle control rats (a), and animals exposed to BPA (10 ug/kg/day) (b), BPA (30 ug/kg/day) (c), and BPA (90 ug/kg/day), (d) (scale bar: 20 um, ×400). Index in PubMed

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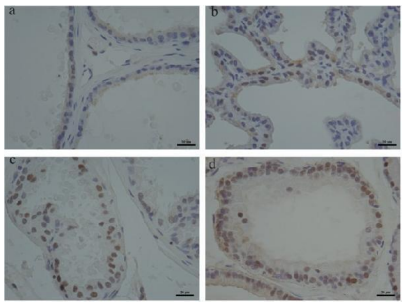
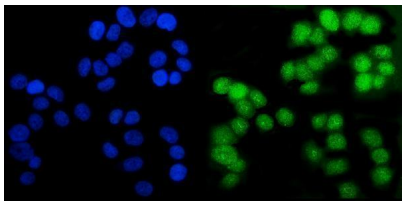
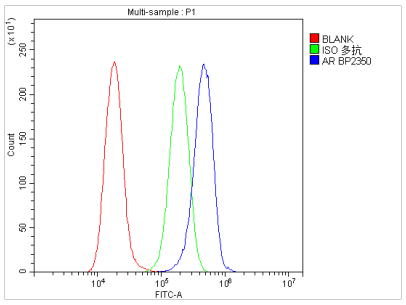
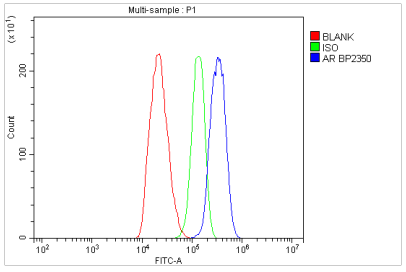




IF analysis of Androgen Receptor/AR using anti-Androgen Receptor/AR antibody (A00542). Androgen Receptor/AR was detected in immunocytochemical section of T47D cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-Androgen Receptor/AR Antibody (A00542) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of A549 cells using anti-Androgen Receptor/AR antibody (A00542). Overlay histogram showing A549 cells stained with A00542 (Blue line).To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Androgen Receptor/AR Antibody (A00542, 1ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Flow Cytometry analysis of C6 cells using anti-Androgen Receptor/AR antibody (A00542). Overlay histogram showing C6 cells stained with A00542 (Blue line).To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Androgen Receptor/AR Antibody (A00542, 1ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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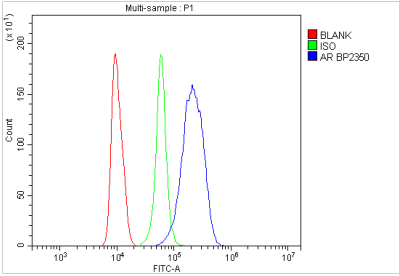
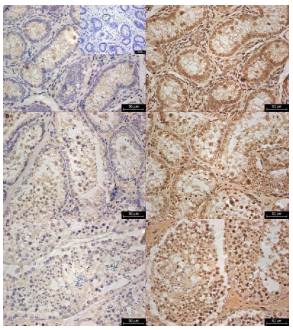
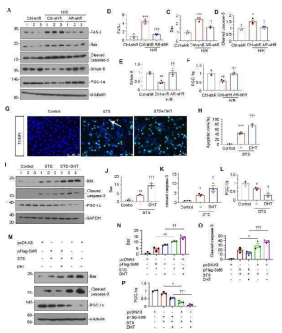


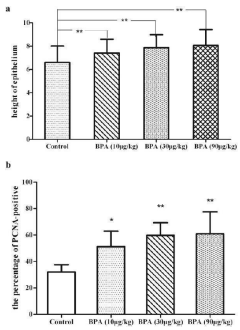
Flow Cytometry analysis of RAW264.7 cells using anti-Androgen Receptor/AR antibody (A00542). Overlay histogram showing RAW264.7 cells stained with A00542 (Blue line).To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Androgen Receptor/AR Antibody (A00542, 1ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Immunoexpression of testosterone (A: 0.1yr, B: 3.5yr and C: 8yr) and estradiol (D: 0.1yr, E: 3.5yr and F: 8yr) in testes from birth to adulthood. Upper insert on panel A: negative control. Black arrows represent spermatozoa. Scale bar = 50 um.Index in PubMed under a CC BY license. PMID: 31966281



Sirtuin 6 plays a key role in AR-induced mitochondrial dysfunction and tubular cell apoptosis in vitro. A – D Representative western blot (A) and graphical representations of (B) Bax, (C) cleaved caspase-3 and (D) PGC-1alpha protein expression levels are shown. * P



(a) Effect on height of dorsolateral prostatic epithelium. After aged rats were treated with 10–90 ug/kg BPA for 3 months, BPA significantly increased the height of DLP epithelium in a dose-dependent way, * P

Effects of BPA on E 2 , T, and Insulin serum levels in aged male rats. After aged rats were treated with 10–90 ug/kg BPA for 3 months, 90 ug/kg BPA significantly increased the E 2 level and the estrogen to androgen ratio; BPA had the trend of decreasing the T level and increasing the insulin

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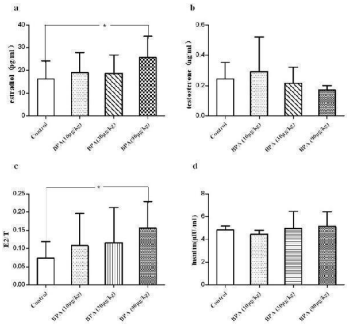
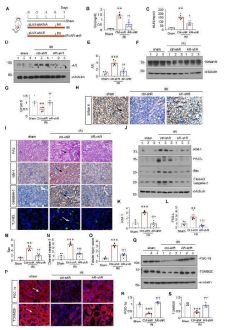
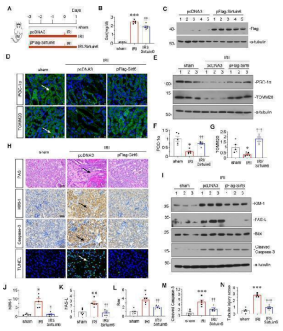


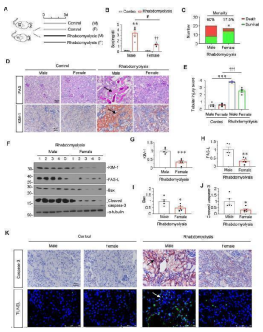
level. p<0.05, compared with the vehicle controls. BPA: bisphenol A. Index in PubMed under a CC BY license. PMID: 29323181



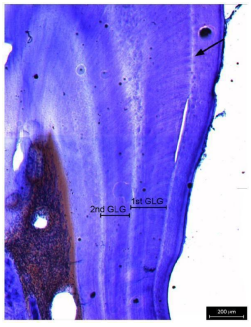
The ectopic knockdown of AR ameliorates renal injury and mitochondrial dysfunction upon IRI. A Experimental design. Green arrow showed the injection of control-shRNA (pLVX-shRNA) or AR-shRNA (pLVX-shAR) plasmid. Male mice were subjected to IRI or sham respectively, and euthanized 24 h after IRI. B Scr levels in three groups, as indicated. Scr was expressed as milligrams per deciliter. ** P



The ectopic expression of Sirtuin 6 relieves renal injury and mitochondrial dysfunction upon IRI. A Experimental design. Green arrow showed the injection of pcDNA plasmid or pFlag-Sirtuin 6 overexpression plasmid. Male mice were subjected to IRI or sham respectively, and euthanized 24 h after IRI. B Scr levels in three groups, as indicated. Scr was expressed as milligrams per deciliter. *** P



Male mice were more susceptive to rhabdomyolysis-induced AKI and tubular apoptosis in kidney. A Experimental design. Female and male mice were intramuscularly injected with 50% glycerol at the dose of 7.5 ml/kg or normal saline respectively. Mice were euthanized 3 days after intramuscular injection. B Scr levels in four groups, as indicated. Scr was expressed as milligrams per deciliter. ** P



Growth layer groups (GLGs) in the thin section of a tooth. One GLG consists of an opaque layer and a translucent layer. The arrow represents the neonatal line. Scale bar = 200 um.Index in PubMed under a CC BY license. PMID: 31966281

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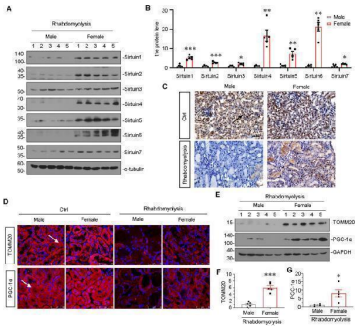
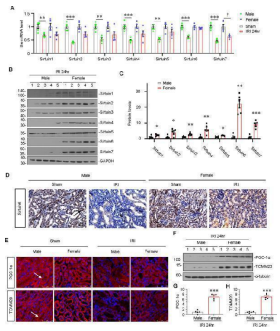
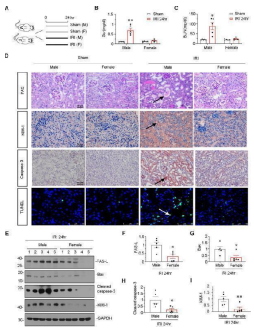


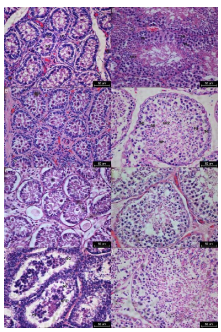
The expression of Sirtuin 6 was the key regulator for gender differences in rhabdomyolysis-induced AKI. A , B Representative western blot (A) and graphical representations of (B) Sirtuin 1-7 protein expression levels are shown. * P



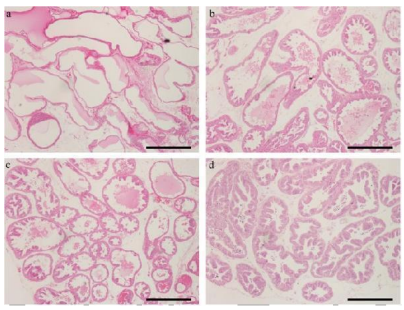
Sirtuin 6 is the possible contributor to gender differences upon IRI. A Graphical representations show the relative abundance of Sirtuin 1-7 mRNA in different groups. ** P



Male mice were more susceptive to IRI and tubular apoptosis in kidney. A Experimental design. Female and male mice were subjected to IRI or sham respectively, and euthanized 24 h after IRI. B Scr levels in four groups, as indicated. Scr was expressed as milligrams per deciliter. ** P



Histological sections of testes from birth to adulthood. LC: Leydig cells; SC: Sertoli cells; PG: Primordial germ cells; SG: Spermatogonia; PS: Primary spermatocytes; SS: Secondary spermatocytes; SPZ: Spermatozoa. (A) 0.1yr. (B) 2.5yr. (C) 3yr. (D) 3.5yr. (E) 4.5yr. (F) 6yr. (G) 8yr. (H) 13yr. Scale bar = 50 um.Index in PubMed under a CC BY license. PMID: 31966281



Histological analysis of dorsolateral prostate in male aged rats treated with BPA for 3 months. The glandular cavity was slightly enlarged and increased in BPA-treated groups. (a – d) Representative sections of comparable regions were shown for vehicle control rats (a), and animals exposed to BPA (10 ug/kg/day) (b), BPA (30 ug/kg/day) (c), and BPA (90 ug/kg/day), (d) (scale bar: 50 um, x40). Index in PubMed under a CC BY license. PMID: 29323181

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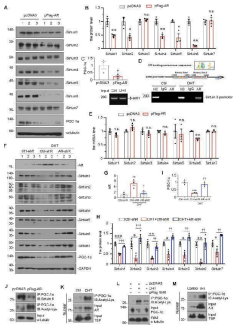
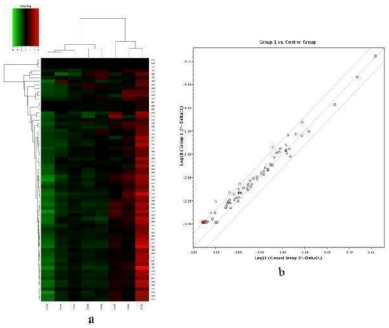


AR increases acetylation of PGC-1alpha by downregulating Sirtuin 6 expression. A – C Representative western blot (A) and graphical representations of (B) Sirtuin 1-7 and (C) PGC-1alpha protein expression levels are shown. * P



Clustering analysis and scatter plot of microarray data. (a) Clustering analysis; (b) scatter plot; Group1: dorsolateral prostate of the BPA group; Group control: dorsolateral prostate of the control group. BPA: bisphenol A. Index in PubMed under a CC BY license. PMID: 29323181

2 Publications Citing This Product

1. PubMed ID: 10.3892/etm.2014.2150, Elevated expression levels of androgen receptors and matrix metalloproteinase-2 and -9 in 30 cases of hepatocellular carcinoma compared with adjacent tissues as predictors of cancer invasion and staging

2. PubMed ID: 10.3980/j.issn.2222-3959.2010.01.10, Effects of extract of Buddleja officinalis eye drops on androgen receptors of lacrimal gland cells of castrated rats with dry eye

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Anti-Androgen Receptor/AR Antibody

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