

Basic Information

Product Name	Anti-Androgen receptor/AR Antibody	
Gene Name	AR	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived human Androgen Receptor/AR recombinant protein (Position: A629-Q920).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	110-120KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF):1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 ⁶ cells (ELISA): 1:100-1000	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

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.

Selected Validation Data

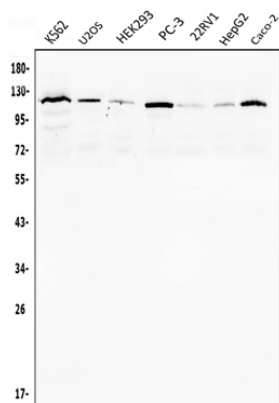


Figure 1. Western blot analysis of anti- AR antibody (A00542). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Human K562 whole cell lysates, Lane 2: Human U2OS whole cell lysates, Lane 3: Human HEK293 whole cell lysates, Lane 4: Human PC-3 whole cell lysates, Lane 5: Human 22RV1 whole cell lysates, Lane 6: Human HepG2 whole cell lysates, Lane 7: Human CACO-2 whole cell lysates, Use rabbit anti-AR 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for AR at approximately 120KD. The expected band size for AR is at 99KD.

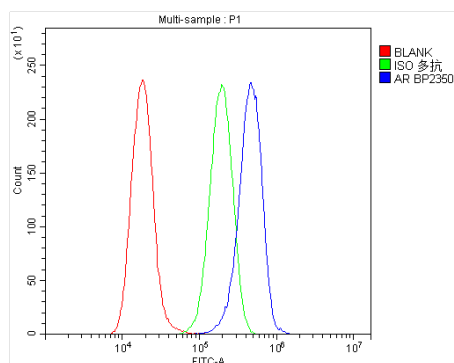


Figure 2. Flow cytometry analysis of A549 cell (1x10⁶) DyLight 488 conjugated goat anti-rabbit IgG (blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).

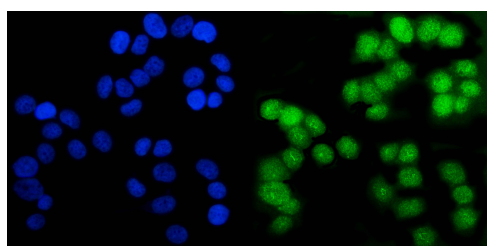


Figure 5. ICC analysis using anti- AR antibody (A00542). was detected in immersion fixed T-47D cell line. Cells were stained using the Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green) (Catalog # BA1127) and counterstained with DAPI (blue).