

## Product datasheet

# Anti-Androgen Receptor antibody [AR 441] ab77557

## 2 References

### 概述

产品名称	Anti-Androgen Receptor抗体[AR 441]
描述	小鼠单克隆抗体[AR 441] to Androgen Receptor
特异性	We have data to indicate that this antibody may not cross react with Mouse. However, this has not been conclusively tested and expression levels may vary in certain cell lines/tissues.
经测试应用	适用于: WB, IP, IHC-P, ICC/IF
种属反应性	与反应: Dog, Human
免疫原	A synthetic peptide from human Androgen Receptor
表位	aa 299-315.
阳性对照	LnCap cells or prostate carcinoma tissue.

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
存储溶液	Preservative: None Constituents: 10mM PBS, pH 7.4
纯度	Protein G purified
纯化说明	ab77557 is purified from ascites fluid by Protein G chromatography.
克隆	单克隆
克隆编号	AR 441
同种型	IgG1

### 应用

Our [Abpromise guarantee](#) covers the use of **ab77557** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
EMSA		

应用	Ab评论	说明
WB		
IP		
IHC-P		
ICC/IF		
<b>应用说明</b>	<p>GSA: Use at an assay dependent dilution.</p> <p>ICC/IF: Use at an assay dependent dilution.</p> <p>IHC-P: 1/25 for 20 minutes at room temperature.</p> <p>Staining of formalin fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0 for 10-20 minutes followed by cooling at room temperature for 20 minutes and detection with a high sensitivity detection system.</p> <p>IP (denatured verified): Use at 2 µg/mg of lysate.</p> <p>WB: Use at a concentration of 1 µg/ml for 2 hours at room temperature. Predicted molecular weight: 99 kDa.</p> <p>Not yet tested in other applications.</p> <p>Optimal dilutions/concentrations should be determined by the end user.</p>	
<b>靶标</b>		
<b>功能</b>	<p>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.</p> <p>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.</p>	
<b>组织特异性</b>	<p>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).</p>	
<b>疾病相关</b>	<p>Androgen insensitivity syndrome</p> <p>Spinal and bulbar muscular atrophy X-linked 1</p> <p>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.</p> <p>Androgen insensitivity, partial</p>	
<b>序列相似性</b>	<p>Belongs to the nuclear hormone receptor family. NR3 subfamily.</p> <p>Contains 1 nuclear receptor DNA-binding domain.</p>	
<b>结构域</b>	<p>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</p>	

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.

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