# abcam

## Product datasheet

## Anti-Androgen Receptor antibody [AR 441] ab9474

★★★★ 12 Abreviews 46 References 画像数3

製品の概要

製品名 Anti-Androgen Receptor antibody [AR 441]

製品の詳細 Mouse monoclonal [AR 441] to Androgen Receptor

由来種 Mouse

特異性 This antibody is specific to a protein of 110 kD, identified as androgen receptor. This antibody

> reacts with full length androgen receptor and also with the newly described A form of the receptor. This antibody does not cross react with estrogen, progesterone or glucocorticoid receptors.

適用あり: Flow Cyt, IHC-P アプリケーション

種交差性 交差種: Human

交差が予測される動物種: Macaque monkey 🔷

免疫原 Synthetic peptide corresponding to Human Androgen Receptor aa 302-318.

Sequence:

**STEDTAEYSPFKGGYTK** 

Database link: P10275

Run BLAST with Run BLAST with

ポジティブ・コントロール

Prostate Carcinoma.

特記事項 The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 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.

バッファー pH: 7.3

Preservative: 0.09% Sodium azide

Constituent: PBS

精製度 Protein G purified

特記事項(精製) purified immunoglobulin fraction.

**ポリ/モノ** モノクローナル

**クローン名** AR 441 s**エローマ** unknown

アイソタイプ IgG1

軽鎖の種類 unknown

## アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab9474の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt		Use at an assay dependent concentration. <b>ab170190</b> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IHC-P	<b>★★★★☆</b> (1)	1/25 - 1/50. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

## ターゲット情報

機能 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.

組織特異性 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).

**関連疾患** 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

**配列類似性** Belongs to the nuclear hormone receptor family. NR3 subfamily.

Contains 1 nuclear receptor DNA-binding domain.

ドメイン 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.

#### 翻訳後修飾

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.

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.

## 製品の状態

細胞内局在

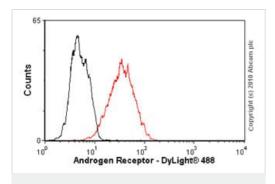
There are 2 isoforms produced by alternative splicing. Isoform 1 is also known as: AR-B; isoform 2 is known as AR-A or variant AR45.

## 画像

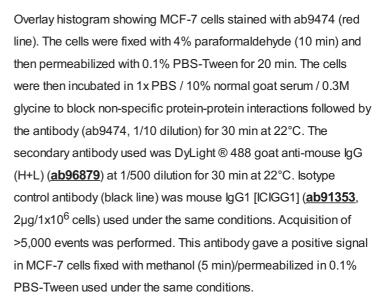


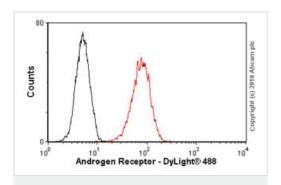
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Androgen Receptor antibody [AR 441] (ab9474)

ab9474 staining human prostate by IHC-P.



Flow Cytometry - Anti-Androgen Receptor antibody [AR 441] (ab9474)





Flow Cytometry - Anti-Androgen Receptor antibody [AR 441] (ab9474)

Overlay histogram showing PC3 cells stained with ab9474 (red line). The cells were fixed with methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab9474, 1/10 dilution) for 30 min at 22°C. The secondary antibody used was DyLight ® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a decreased signal in PC3 cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

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

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