

Rabbit Anti-Androgen Receptor [MD124R]: RM0004, RM0004RTU7

Intended Use: For Research Use Only

Description: Androgen receptor (AR) is a member of the steroid receptor superfamily that is essential for the growth of prostate cancer cells. It has been reported that tyrosine phosphorylation of AR is induced by growth factors and elevated in hormone-refractory prostate tumors. Data suggest that growth factors and their downstream tyrosine kinases, which are elevated during hormone-ablation therapy, can induce tyrosine phosphorylation of AR. Such modification may be important for prostate tumor growth under androgen-depleted conditions. Cellular signaling occurs following androgen binding to the AR and translocation to the nucleus. This activated complex associates with androgen-responsive elements contained in the DNA sequence of target genes, affecting the transcriptional activity of these genes. AR antibody labels epithelial cells and stromal cells in normal prostate. AR reactivity is also found in other types of cells, including epithelial cells of the breast and hepatocytes. In prostate cancer, AR expression is maintained throughout cancer progression. Immunohistochemistry of AR is useful for the evaluation of prostate cancer AR in routinely processed tissues. The majority of androgen independent hormone refractory prostate cancers express AR.

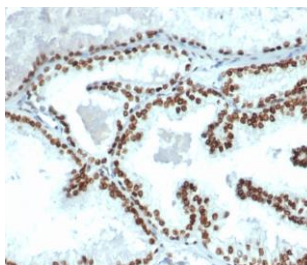
Specifications:

Clone: MD124R
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Localization: Nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
Androgen Receptor Concentrated	RM0004	1 ml
Androgen Receptor Prediluted	RM0004RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Prostate, prostate cancer
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human prostate cancer stained with anti-AR using DAB

References:

1. PYK2 via S6K1 regulates the function of androgen receptors and the growth of prostate cancer cells. Hsiao YH, et al. *Endocr Relat Cancer* 23:651-63, 2016.
2. Symmetrical and asymmetrical division analysis provides evidence for a hierarchy of prostate epithelial cell lineages. Wang J, et al. *Nat Commun* 5:4758, 2014.
3. Activation of Wnt/ β -catenin signaling in a subpopulation of murine prostate luminal epithelial cells induces high grade prostate intraepithelial neoplasia. Valkenburg KC, et al. *Prostate* 74:1506-20, 2014.

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Rev. B