

### Androgen Receptor AR441

Format	Catalog No.	Pack size	Dilution
Concentrated	GB109A	0.1 mL	1:100
Prediluted	GB109AA	6.0 mL	RTU

#### PRODUCT DESCRIPTION -

The whole length and A-form of the androgen receptor (AR) are reacted with by the antibody. It does not cross-react with glucocorticoid, progesterone, or estrogen receptors and is considered to be very selective. According to reports, androgen receptor expression is low or nonexistent in poorly differentiated cancers and high in well-differentiated tumors. Because high expression of Androgen Receptor in biopsies may help identify patients who might respond to androgen ablation therapy, androgen has been recommended as a measure of hormone-responsiveness in prostate cancer. Dermatopathology, Paget's disease, and breast cancer are further uses for androgen receptor antibodies.

#### INTENDED USE -

For Diagnostic Use in Vitro A mouse monoclonal antibody called Androgen Receptor [AR441] is designed for use in lab settings to qualitatively identify the androgen receptor protein in using immunohistochemistry (IHC). Any staining's clinical interpretation, or for the use of the product should be supported by (FHC) pathologic investigations employing appropriate controls and assessed by a trained pathologist in light of the patient's medical history and additional diagnostic procedures.

#### SUMMARY AND EXPLANATION -

The 110 kDa molecular weight protein known as the androgen receptor (AR) is recognized by the androgen receptor antibody. It responds to the receptor's entire length and A shape. It is quite selective and doesn't interact with glucocorticoid, progesterone, or estrogen receptors. According to reports, there is an inverse relationship between the expression of AR and poorly differentiated tumors; well-differentiated tumors have high levels of AR expression, while poorly differentiated tumors exhibit little to no androgen receptor expression. High expression of the androgen receptor in prostate cancer biopsies may aid in identifying patients who would benefit from anti-androgen therapy because androgen has been suggested as a measure of hormone responsiveness in prostate cancer.

Dermatopathology, Paget's disease, and breast cancer are further uses for the androgen receptor.

PRINCIPLE OF PROCEDURE -

Antigen detection in tissues and cells is a multi-step immunohistochemistry procedure. The first step attaches the primary antibody to its designated epitope. Following the tagging of the antigen with a primary antibody, a secondary antibody is introduced to attach to the primary antibody. An enzyme label is subsequently introduced to attach to the secondary antibody; the detection of the attached antibody is demonstrated using a colorimetric reaction.

SOURCE - Mouse monoclonal

SPECIES REACTIVITY - Human; others not tested

CLONE- AR441

ISOTYPE - : IgG1

PROTEIN CONCENTRATION - ~10 mg/ml. Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - Androgen receptor

CELLULAR LOCALISATION - Nuclear

POSITIVE TISSUE CONTROL - Prostate cancer or normal prostate

KNOWN APPLICATIONS - Immunohistochemistry

30-40 min. At RT. Staining of formalin-fixed tissues requires heating tissue sections in between pH 7.4 - 9.0 for 45 min at 95°C followed by cooling at room temperature for 20 minutes.

SUPPLIED AS - Buffer with protein carrier and preservative

STORAGE AND STABILITY -

Store at 2°C to 8°C. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Materials required but not provided -

1) Positive tissue control-Prostate cancer or normal prostate

- 2) Negative control tissue (internal or external)
- 3) Microscope slides and coverslips
- 4) Staining jars or baths
- 5) Timer
- 6) Xylene or xylene substitute
- 7) Ethanol or reagent alcohol
- 8) Deionized or distilled water
- 9) Heating equipment or enzyme for tissue pretreatment step
- 10) Detection system
- 11) Chromogen
- 12) Wash buffer
- 13) Hematoxylin
- 14) Antibody diluents
- 15) Peroxide block
- 16) Light microscope
- 17) Mounting medium

#### LIMITATIONS-

The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Genebio products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.