# **Technical Data Sheet**

# Purified Mouse Anti-Human Androgen Receptor

#### **Product Information**

**Material Number:** 554225 Size:  $0.1 \, \text{mg}$ 0.5 mg/mlConcentration: G122-434 Clone:

Immunogen: Purified human androgen receptor recombinant protein

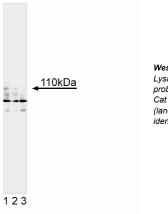
Isotype: Mouse IgG2a Reactivity: QC Testing: Human

Target MW: 100 kDa

Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

#### Description

The androgen receptor (AR) mediating androgen effects is a member of the steroid and thyroid hormone receptor gene superfamily encoding liganddependent nuclear transcription factors. They can be divided into three main domains, an N-terminal domain which modulates transcription efficiency, a central DNA domain which binds to a target gene hormone response element, and a C-terminal hormone binding domain. Androgens are necessary for normal male development and function. They exert their effects on target tissue through binding to the AR, followed by association of the AR complex with specific binding sites on DNA. This AR complex may induce or repress gene transcription. Mutations in the AR gene are associated with androgen insensitivity syndrome, a disorder that causes XY genotypic males to develop as phenotypic females because of their inability to respond to androgens. AR mutations have also been identified in human prostate cancer specimens and the LNCaP human prostate cancer cell line. Monoclonal and polyclonal antibodies to the AR have identified AR-positive cells in a variety of tissues including male and female sexual organs, kidney, liver, adrenal cortex, pituitary gland, skeletal, cardiac, and smooth muscle cells. The androgen receptor has been identified as a 100 kDa protein in SDS/PAGE. G122-434 recognizes an epitope localized within the N-terminal domain (between amino acids 33 and 485) of the human androgen receptor protein. The antibody does not recognize estrogen or progesterone receptors. Purified recombinant human androgen receptor protein was used as immunogen.



Western blot analysis of androgen receptor (AR).

Lysates from LNCaP human prostate carcinoma cells were probed with anti-human androgen receptor (clone G122-434, Cat No. 554225) at a concentrations of 2.0 (lane 1), 1.0 (lane 2), and 0.5 μg/ml (lane 3). The androgen receptor is identified at 100 kDa.

## **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4°C.

#### **Application Notes**

#### Application

Western blot	Routinely Tested
Immunohistochemistry-frozen	Tested During Development
Immunoprecipitation	Tested During Development

## **Recommended Assay Procedure:**

Applications include western blot analysis (1-2 µg/ml), immunoprecipitation (1-2 µg/ml) and immunohistochemical staining of frozen tissue sections (titrate between 5 and 20 µg/ml). LNCaP prostate carcinoma cells (ATCC CRL 1740) are suggested as positive controls.

## **BD Biosciences**

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554225 Rev. 10

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## **Suggested Companion Products**

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

### **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

## References

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Zhu W, Smith A, Young CY. A nonsteroidal anti-inflammatory drug, flufenamic acid, inhibits the expression of the androgen receptor in LNCaP cells. *Endocrinology*. 1999; 140(11):5451-5454.(Biology)

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