Technical Data Sheet

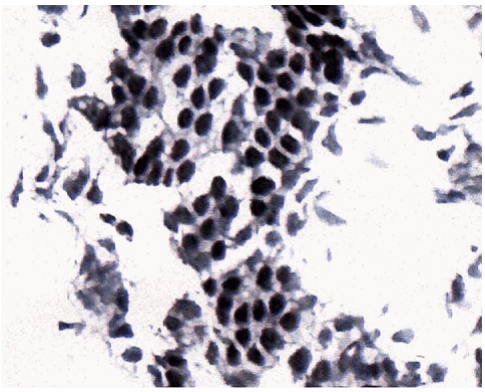
Purified Mouse Anti-Androgen Receptor

Product Information

Material Number:	**554226**
Alternate Name:	AR
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	G122-77
Immunogen:	Human Androgen Receptor Recombinant Protein
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Human Tested in Development: Rat
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 ligand dependent 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 (ATCC CRL-1740). 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 reported to migrate at a molecular weight of 100 kDa by SDS-PAGE. G122-77 has been reported to recognize the N-terminal portion of the human androgen receptor protein and reportedly does not recognize estrogen or progesterone receptors.



Immunohistochemical staining of a frozen human prostate cancer tissue section. *The androgen receptor (AR) is identified within the nucleus of gland epithelial cells using the mouse anti-androgen receptor antibody (clone G122-77). Investigators are highly encouraged to peform a titration with a suggested range from 5 µg/ml to 20 µg/ml.*

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

Immunohistochemistry-frozen	Routinely Tested
Immunoprecipitation	Tested During Development

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Suggested Companion Products

Catalog Number	Name	Size	Clone
551011	Anti-Mouse Ig HRP Detection Kit	200 tests	(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.
3. 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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Fuller PJ. The steroid receptor superfamily: mechanisms of diversity. *FASEB J.* 1991; 5(15):3092-3099.(Biology)

Newmark JR, Hardy DO, Tonb DC, et al. Androgen receptor gene mutations in human prostate cancer. *Proc Natl Acad Sci U S A.* 1992; 89(14):6319-6323.(Biology)

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