

AR

Androgen Receptor

human, recombinant, Sf9 insect cells

Cat. No.	Amount
PR-867	5 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 mM KCl, 1 mM DTT, 0.2 mM EDTA and 20% glycerol.

Application

AR can be used for a gel mobility shift assay, for a protein-protein and small molecules-protein interaction assays.

Molecular Weight

101 kDa

Purity

> 95% by SDS-PAGE

Description

This His tagged recombinant AR is expressed in a baculovirus system and purified by an affinity chromatography in combination with FPLC chromatography.

The androgen receptor is an androgen-activated member of the nuclear receptor superfamily of transcription factors. Signaling by the androgen receptor plays a key role in proper development and function of male reproductive organs. The androgen receptor gene is more than 90 kb long and codes for a protein that has 3 major functional domains: the N-terminal domain, DNA-binding domain, and androgen-binding domain. The protein functions as a steroid-hormone activated transcription factor. Upon binding the hormone ligand, the receptor dissociates from accessory proteins, translocates into the nucleus, dimerizes, and then stimulates transcription of androgen responsive genes. This gene contains 2 polymorphic trinucleotide repeat segments that encode polyglutamine and polyglycine tracts in the N-terminal transactivation domain of its protein. Expansion of the polyglutamine tract causes spinal bulbar muscular atrophy (Kennedy disease). Mutations in this gene are also associated with complete androgen insensitivity (CAIS). Two alternatively spliced variants encoding distinct isoforms have been described. The androgen receptor (AR) has been shown to play a critical role in the development and progression of the prostate cancer.

Selected References:

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- Kinoshita *et al.* (2005) Differently regulated androgen receptor transcriptional complex in prostate cancer compared with normal



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prostate. *Am. J. Hum. Genet.* **12**:390.