

Recombinant Human AR, His-tagged

Cat. No. AR-1012H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Human Androgen Receptor Ligand Binding Domain (650-920) was expressed in E.coli.

Species Human

Source E.coli

ProteinLength 650-920 a.a.

Description 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.

Form The protein is in 20mM Tris-HCl pH7.9, 100mM NaCl, 0.2mM EDTA, 1mM DTT and 20% glycerol.

Molecular Mass 33.7 kDa.

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AA Sequence

TSPTEETTQK LTVSHIEGYE CQPIFLNVLE AIEPGVVCAG HDNNQPDSFA
 ALLSSLNELG ERQLVHVVKW AKALPGFRNL HVDDQMAVIQ YSWMGLMVFA
 MGWRSFTNVN SRMLYFAPDLVFNEYRMHKS RMYSQCVRMR HLSQEFGWLQ
 ITPQEFLCMK ALLLFSIIPV DGLKNQKFFD ELRMNYIKEL DRIIACKRKN
 PTSCSRRFYQ LTKLLDSVQP IARELHQFTF DLLIKSHMVSVDPEMMAEI
 ISVQVPKILS GKVKPIYFHT Q

Purity

The purified AR-LBD is greater than 90% homogeneous based on SDS-PAGE analysis.

Unit Definition

1 unit equals 1 nanogram of purified protein.

Applications

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

Storage

Stored at -70°C before use. Avoid repeated freeze thaw cycles.

GENE INFORMATION

Gene Name

AR androgen receptor [[Homo sapiens \(human\)](#)]

Official Symbol

AR

Synonyms

AR; KD; AIS; TFM; DHTR; SBMA; HYSP1; NR3C4; SMAX1; HUMARA; androgen receptor; dihydrotestosterone receptor; androgen nuclear receptor variant 2; nuclear receptor subfamily 3 group C member 4

Gene ID

[367](#)

mRNA Refseq

[NM_000044](#)

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Protein Refseq	NP_000035
MIM	313700
UniProt ID	P10275
Chromosome Location	Xq12
Pathway	Alpha6-Beta4 Integrin Signaling Pathway; Coregulation of Androgen receptor activity; FOXA1 transcription factor network
Function	DNA binding; RNA polymerase II transcription factor binding; androgen binding

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