

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 ALLFSIIPV 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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