

Recombinant Human AR, Flag-tagged

Cat. No. AR-8486H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human AR, fused with Flag tag, was expressed in Sf21 Cells.
Species	Human
Source	Sf21 Cells
ProteinLength	1-920 aa
Description	AR (dihydrotestosterone receptor); testicular feminization; spinal and bulbar muscular atrophy; Kennedy disease. 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

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	prostate cancer.
Form	20 mM Tris-Cl, pH 7.9, 20% Glycerol, 100 mM KCl, 1 mM DTT and 0.2 mM EDTA
AA Sequence	MEVQLGLGRV YPRPPSKTYR GAFQNLFSV REVIQNPGRP HPEAASAAPP GASLLLLQQQ QQQQQQQQQQ QQQQQQQQQQ ETSPRQQQQQ QGEDGSPQAH RRGPTGYLVL DEEQPSQPQ SALECHPERG CVPEPGAAVA ASKGLPQQLP APPDEDDSA PSTLSLLGPT FPGLSSCSAD LKDILSEAST MQLLQQQQQE AVSEGSSSGR AREASGAPTS SKDNYLGGTS TISDNAKELC KAVSVSMGLG VEALEHLSPG EQLRGDCMYA PLLGVPPAVR PTPCAPLAEC KGSLLDDSAG KSTEDTAEYS PFKGGYTKGL EGESLGCSGS AAAGSSGTLE LPSTLSLYKS GALDEAAAYQ SRDYNNFPLA LAGPPPPPP PHPHARIKLE NPLDYGSWA AAAAQCRYGD LASLHGAGAA GPGSGSPSAA ASSSWHTLFT AEEGQLYGPC GGGGGGGGGG GGGGGGGGGG GGGEAGAVAP YGYTRPPQGL AGQESDFTAP DVWYPGGMVS RVPYPSPTCV KSEMGPWMDS YSGPYGDMRL ETARDHVLPI DYYFPPQKTC LICGDEASGC HYGALTCGSC KVFFKRAAEG KQKYLCAARN DCTIDKFRRK NCPSCRLRKC YEAGMTLGAR KLKKGNLKL QEEGEASSTT SPTEETTQKL TVSHIEGYEC QPIFLNVLEA IEPGVVCAGH DNNQPDFAA LLSSLNELGE RQLVHVVKWA KALPGFRNLH VDDQMAVIQY SWMGLMVFAM GWSFTNVNS RMLYFAPDLV FNEYRMHKS MYSCVVRMRH LSQEFGLWLI TPQEFCLMKA LLLFSIIPVD GLKNQKFFDE LRMNYIKELD RIIACKRKNP TSCSRRFYQL TKLLDSVQPI ARELHQFTFD LLIKSHMVSV DFPEMMAEII SVQVPKILSG KVKPIYFHTQ
Purity	>95% as determined by SDS-PAGE
Storage	-80 °C
Shipping	Dry Ice

GENE INFORMATION

Gene Name	AR androgen receptor [Homo sapiens]
Official Symbol	AR
Synonyms	AR; androgen receptor; DHTR, dihydrotestosterone receptor , SBMA, spinal and bulbar muscular atrophy; AIS; HUMARA; Kennedy disease; NR3C4; SMAX1; testicular feminization; dihydrotestosterone receptor; androgen nuclear receptor variant 2; nuclear receptor subfamily 3 group C member 4; KD; TFM; DHTR; SBMA; HYSPI;
Gene ID	367
mRNA Refseq	NM_000044
Protein Refseq	NP_000035
MIM	313700
UniProt ID	P10275
Chromosome Location	Xq12
Pathway	Alpha6-Beta4 Integrin Signaling Pathway, organism-specific biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem; Coregulation of Androgen receptor activity, organism-specific biosystem; FOXA1 transcription factor network, organism-specific biosystem; Gene Expression, organism-specific biosystem; Generic Transcription Pathway, organism-specific biosystem; IL-6 Signaling Pathway, organism-specific biosystem;

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Function

DNA binding; DNA binding; POU domain binding; androgen binding; androgen receptor activity; androgen receptor activity; androgen receptor activity; androgen receptor activity; androgen receptor activity; androgen receptor binding; beta-catenin binding; beta-catenin binding; beta-catenin binding; chromatin binding; enzyme binding; ligand-activated sequence-specific DNA binding RNA polymerase II transcription factor activity; metal ion binding; protein binding; protein dimerization activity; receptor activity; receptor binding; sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity; steroid binding; transcription factor binding; transcription regulatory region DNA binding; zinc ion binding;

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