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Recombinant Human Androgen Receptor (AR)

Catalog number:	Size:	Species:	Accession number:
RB-14-0003P	10, 50, 100 µg	Human	NP_000035

Synonyms

AIS, DHTR, HUMARA, KD, NR3C4, SBMA, SMAX1, TFM.

Description

The androgen receptor (AR), also known as NR3C4 (nuclear receptor subfamily 3, group C, member 4), is a type of nuclear receptor which is activated by binding of either of the androgenic hormones testosterone or dihydrotestosterone. The androgen receptor is most closely related to the progesterone receptor, and progestins in higher dosages can block the androgen receptor. The main function of the androgen receptor is as a DNA binding transcription factor which regulates gene expression. However, the androgen receptor has other functions as well. Androgen regulated genes are critical for the development and maintenance of the male sexual phenotype.

Preparation

The human androgen receptor gene was cloned and expressed in *Escherichia coli*. The recombinant human androgen receptor protein has been engineered an in-framed 6×histidine tag. The recombinant protein was affinity-purified by histidine-tag using HisTrap FF column and confirmed by Western blotting and ELISA using anti-androgen receptor antibody.

Source

Recombinant histidine-tagged protein, purified from *E. coli*.

Predicted Molecular Mass

~62 kDa with the 6×histidine tag.

Formulation

Liquid, clear solution. Supplied as a 0.2 µm filtered solution of 0.1 M $NaHCO_3$, 0.5 M NaCl, pH 7.5.

Solubility

The product is soluble in the neutral buffer indicated above.

Storage

The protein is stable at -20 to -70 °C in a manual defrost freezer. Avoid repeated freeze-thaw cycles.

Purity

>95%, determined by SDS-PAGE and stained with Commassie blue.

Applications

Options / Functions	Yes	No	Not Determined
ELISA	√		
Western blotting	√		
Dot blotting	√		
Protein array	√		
Activity			√
Others			√

Note: it is recommended that the users should optimize the working conditions in their own assay systems.

References

1. Vlahopoulos S, Zimmer WE, Jenster G, Belaguli NS, Balk SP, Brinkmann AO, Lanz RB, Zoumpourlis VC, Schwartz RJ (2005). "Recruitment of the androgen receptor via serum response factor facilitates expression of a myogenic gene". *J. Biol. Chem.* **280** (9): 7786–92.
2. Chang CS, Kokontis J, Liao ST (1988). "Molecular cloning of human and rat complementary DNA encoding androgen receptors". *Science* **240** (4850): 324–6.