

Goat Anti-Androgen Receptor Antibody Peptide-affinity purified goat antibody Catalog # AF1061a

Specification

Goat Anti-Androgen Receptor Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, IHC, E <u>P10275</u> <u>NP_000035</u>, <u>367</u>, <u>11835 (mouse)</u>, <u>24208 (rat)</u> Human Mouse, Rat, Pig, Dog Goat Polyclonal 100ug/200ul IgG 99188

Goat Anti-Androgen Receptor Antibody - Additional Information

Gene ID 367

Other Names Androgen receptor, Dihydrotestosterone receptor, Nuclear receptor subfamily 3 group C member 4, AR, DHTR, NR3C4

Dilution WB~~1:1000 IHC~~1:100~500 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-Androgen Receptor Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Androgen Receptor Antibody - Protein Information

Name AR

Synonyms DHTR, NR3C4



Function

Steroid hormone receptors are ligand-activated transcription factors that regulate eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues (PubMed:19022849). Transcription factor activity is modulated by bound coactivator and corepressor proteins like ZBTB7A that recruits NCOR1 and NCOR2 to the androgen response elements/ARE on target genes, negatively regulating androgen receptor signaling and androgen-induced cell proliferation (PubMed:20812024). Transcription activation is also down-regulated by NROB2. Activated, but not phosphorylated, by HIPK3 and ZIPK/DAPK3.

Cellular Location

Nucleus. Cytoplasm Note=Detected at the promoter of target genes (PubMed:25091737) Predominantly cytoplasmic in unligated form but translocates to the nucleus upon ligand-binding. Can also translocate to the nucleus in unligated form in the presence of RACK1.

Tissue Location

[Isoform 2]: Mainly expressed in heart and skeletal muscle.

Goat Anti-Androgen Receptor Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-Androgen Receptor Antibody - Images



AF1061a(0.3 μ g/ml) staining of Human Brain lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





AF1061a (2 μ g/ml) staining of paraffin embedded Human Prostate. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



ChIP of 2ug AF1061a with 1ug DHT-treated HEC50 chromatin using the using the Chromatrap® spin column sonication kit (Protein G) measuring FKBP5 enrichment.

Goat Anti-Androgen Receptor Antibody - Background

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.

Goat Anti-Androgen Receptor Antibody - References

Depressive Symptoms in Men Aged 50 Years and Older and Their Relationship to Genetic Androgen Receptor Polymorphism and Sex Hormone Levels in Three Different Samples. Schneider G, et al. Am J Geriatr Psychiatry, 2010 Jun 25. PMID 20808127.

Germline study of AR gene of Indian women with ovarian failure. Panda B, et al. Gynecol Endocrinol, 2010 Jul 30. PMID 20672904.

Bone mass and the CAG and GGN androgen receptor polymorphisms in young men.

Guadalupe-Grau A, et al. PLoS One, 2010 Jul 12. PMID 20634949.

Comprehensive analysis of common genetic variation in 61 genes related to steroid hormone and insulin-like growth factor-I metabolism and breast cancer risk in the NCI breast and prostate cancer cohort consortium. Canzian F, et al. Hum Mol Genet, 2010 Oct 1. PMID 20634197.

Polymorphisms in the AR and PSA Genes as Markers of Susceptibility and Aggressiveness in Prostate Cancer. Kuasne H, et al. Cancer Invest, 2010 Jul 15. PMID 20632874.