

# Phospho Ser94 Androgen Receptor (AR) Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1248

## Specification

## Phospho Ser94 Androgen Receptor (AR) Antibody - Product Information

Application	WB
Primary Accession	<u>P10275</u>
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	polyclonal
Calculated MW	<b>110 KDa</b>

### Phospho Ser94 Androgen Receptor (AR) Antibody - Additional Information

Gene ID367Gene NameAROther NamesAndrogen receptor, Dihydrotestosterone receptor, Nuclear receptor subfamily 3 group C member4, AR, DHTR, NR3C4

#### Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser94 conjugated to KLH.

**Dilution** WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phosphoand dephosphopeptide affinity columns.

### **Antibody Specificity**

Specific for the  $\sim$ 110k AR protein phosphorylated at Ser94. Immunolabeling is blocked by preadsorption of antibody with the phospho-peptide that was used to generate the antibody but not by the corresponding dephospho-peptide.

#### 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**

Phospho Ser94 Androgen Receptor (AR) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice



# Phospho Ser94 Androgen Receptor (AR) Antibody - Protocols

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

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

## Phospho Ser94 Androgen Receptor (AR) Antibody - Images



Western blot of HeLa lysate showing specific immunolabeling of the  $\sim 110$  kD AR protein phosphorylated at Ser94. The phosphospecificity is shown in the second lane where immunoreactivity is blocked by preadsorption with the phospho-peptide (Peptide) used as antigen.

### Phospho Ser94 Androgen Receptor (AR) Antibody - Background

The androgen receptor (AR) is a DNA-binding transcription factor that regulates genes critical for the development and maintenance of the male sexual phenotype. Defects in androgen receptor have been shown to play a role in prostate cancer, and inhibition of AR activity through modulation of signal transduction pathways may delay prostate cancer progression (Heinlein and Chang 2004). Multiple phosphorylation sites have been identified on the androgen receptor that affect cross-talk between growth factor signaling and androgen in prostate development and cancer (Gioeli et al., 2002). One of these sites, at Ser94, appears constitutively phosphorylated and exhibits no response to treatments with stimulating hormone (Gioeli et al., 2002). The site at Ser94 is unique among the AR phosphorylation sites in that it does not achieve a maximal level of phosphorylation between translation and the initial round of nuclear import, having a strong bias for androgen-independent phosphorylation in the cytoplasm (Kesler et al., 2007).

# Phospho Ser94 Androgen Receptor (AR) Antibody - References

Heinlein C, Chang C. (2004) Androgen Receptor in Prostate Cancer. Endocrine Reviews. 25(2):276-308 Gioeli D, Ficarro S, Kwiek J, Aaronson D, Hancock M, Catling A, White F, Christian R, Settlage R,



Shabanowitz J, Hunt D, Weber M. (2002) Androgen Receptor Phosphorylation, Regulation and Indentification of the Phosphorylation Sites. J Biol Chem. 277(32):29304-29314 Kesler C, Gioeli D, Conaway M, Weber M, Paschal B. (2007) Subcellular Localization Modulates Activation Function 1 Domain Phosphorylation in the Androgen Receptor. Molecular Endocrinology. 21(9):2071-2084