

# Nuclear Receptor Antibody Sampler Kit

Cat# AK0210

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

## PRODUCT DESCRIPTION

Nuclear Receptors are transcription factors responsible for sensing bioactive molecules, including steroid and thyroid hormones. They are regulated by multiple posttranslational modifications, which in turn impacts their ability to regulate the expression of specific genes involved in the control of reproduction, development, and metabolism. Androgen receptor (AR), a zinc finger transcription factor belonging to the nuclear receptor superfamily, is activated by phosphorylation and dimerization upon ligand binding. This promotes nuclear localization and binding of AR to androgen response elements in androgen target genes. AR plays a crucial role in several stages of male development and the progression of prostate cancer. Estrogen receptor  $\alpha$  (ER  $\alpha$ ), a member of the steroid receptor superfamily, contains highly conserved DNA binding and ligand binding domains. Through its estrogen-independent and estrogen-dependent activation domains (AF-1 and AF-2, respectively), ER  $\alpha$  regulates transcription by recruiting coactivator proteins and interacting with general transcriptional machinery. Glucocorticoid hormones control cellular proliferation, inflammation, and metabolism through their association with the glucocorticoid receptor (GR)/NR3C1, a member of the nuclear hormone receptor superfamily of transcription factors. Peroxisome proliferator-activated receptor  $\gamma$  (PPAR  $\gamma$ ) is a member of the ligand-activated nuclear receptor superfamily and functions as a transcriptional activator. PPAR  $\gamma$  is preferentially expressed in adipocytes, as well as in vascular smooth muscle cells and macrophages. Besides its role in mediating adipogenesis and lipid metabolism, PPAR  $\gamma$  also modulates insulin sensitivity, cell proliferation, and inflammation. Human progesterone receptor (PR) is expressed as two forms: the full length PR B and the short form PR A. PR A lacks the first 164 amino acid residues of PR B. Both PR A and PR B are ligand activated, but differ in their relative ability to activate target gene transcription (12,13). Nuclear retinoid

## PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340407	Glucocorticoid Receptor Polyclonal Antibody	20 $\mu$ L	WB	Human, Mouse, Rat	Rabbit
A340649	PGR Polyclonal Antibody	20 $\mu$ L	WB, IHC, IF, ELISA	Human	Rabbit
A340432	AR Polyclonal Antibody	20 $\mu$ L	WB, IHC, ELISA	Human	Rabbit
A340513	ER alpha Polyclonal Antibody	20 $\mu$ L	WB, IHC, ELISA	Human	Rabbit

<b>A340647</b>	PPARG Polyclonal Antibody	20μL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
<b>A1013s</b>	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120μL	WB, ELISA	Rabbit	Goat

## **PRODUCT USE LIMITATION**

These products are intended for research use only.