

Product datasheet for **TA336259**

Aryl hydrocarbon Receptor (AHR) Goat Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ChIP, ICC/IF, IHC, WB
Recommended Dilution:	Chromatin Immunoprecipitation, Western Blot, Gel Super Shift Assays, Immunocytochemistry/ Immunofluorescence: 1:100, Immunohistochemistry: 1:100 - 1:200, Immunohistochemistry-Paraffin: 1:100 - 1:200
Reactivity:	Human, Mouse, Rat
Host:	Goat
Clonality:	Polyclonal
Immunogen:	N-terminal sequence of Aryl hydrocarbon Receptor purified from C57BL/6J mice. [UniProt# P30561]
Formulation:	Preservative: 0.05% Sodium Azide. Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Whole antisera
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	aryl hydrocarbon receptor
Database Link:	NP_001612 Entrez Gene 11622 Mouse Entrez Gene 25690 Rat Entrez Gene 196 Human P35869



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Background:

Aryl hydrocarbon Receptor (AhR) is a ligand-activated transcriptional activator that binds to XRE promoter region of its target genes and has been established to activate phase I/II xenobiotic biotransformation enzyme genes. AhR binds MYBBP1A and its efficient DNA binding requires dimerization with another bHLH proteinsuch as ARNT. Besides interacting with NEDD8 and IVNS1ABP, AhR also interacts with coactivators including SRC-1, RIP140 and NOCA7, and with the corepressor SMRT. AhR localize to cytoplasm and upon binding with ligand followed by interaction with a HSP90, it translocates to the nucleus. AhR has been shown to be induced or repressed by TGFB1 as well as dioxin in a cell-type specific fashion, whereas cAMP, retinoic acid, TPA (12-O-tetradecanoyl phorbol-13 acetate) have been shown to exert repressive effects on AhR. As a member of bHLH-PAS (basic helix-loop-helix Per/ARNT/Sim) family, AhR has been implicated in physiological processes such as circadian cycle, neurogenesis, organs development and regulation of cell-cycle as well as the alternative signaling pathways (independently of exposure to xenobiotics). AhR- mice exhibit infertility, liver abnormalities and cardiovascular problems such as a defective closure of the ductus venosus, indicative of the implication of the AhR in various developmental processes.

Synonyms:

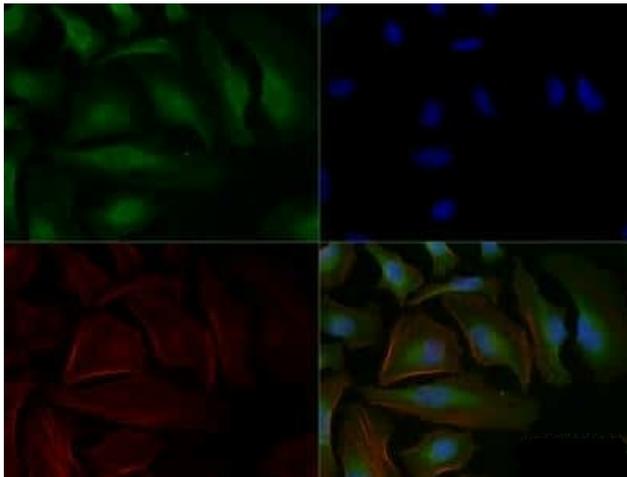
bHLHe76

Note:

This Aryl hydrocarbon Receptor antibody is useful for Gel Super Shift Assays. Suggested working dilution: add 4 ul Aryl hydrocarbon Receptor antibody to a 15 ul final volume of EMSA sample. This antibody does not work in Western blot. Use in Chromatin Immunoprecipitation reported in the scientific literature (PMID: 14718646). Use in Immunofluorescence reported in the scientific literature (PMID: 18515748). Use in Electron Microscopy and western blot reported in scientific literature (PMID 23999131) Other applications have not been tested.

Protein Families:

Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

Product images:

Immunocytochemistry/Immunofluorescence: AHR Antibody TA336259 - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton X-100. The cells were incubated with anti AHR TA336259 at a 1:100 dilution overnight at 4C and detected with an anti-goat DyLight 488 (Green) at a 1:500 dilution. Actin was detected with Phalloidin 568 (Red) at a 1:200 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.