

Rabbit anti-Human, mouse AHR Polyclonal Antibody | anti-AHR antibody

AHR Antibody (Center)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA283969	Rabbit	Human, mouse	ELISA, Western Blot

PRODUCT SYNONYMS

AHR; Polyclonal Antibody; AHR Antibody (Center); Aryl hydrocarbon receptor; Ah receptor; AhR; Class E basic helix-loop-helix protein 76; bHLHe76; BHLHE76; anti-AHR antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, mouse
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This AHR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 555-582 amino acids from the Central region of human AHR.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Sequence Positions	555-582
Sequence Length	848
Applicable Applications for anti-AHR antibody	ELISA, WB (Western Blot)
Function	Ligand-activated transcriptional activator.Binds to the XRE promoter region of genes itactivates (PubMed: , PubMed:28602820,PubMed: , PubMed:23275542, PubMed:30373764). Activates the expression of multiple phase I and II xenobiotic chemical metabolizing enzyme genes (such as the CYP1A1 gene) (PubMed:). Mediates biochemical and toxic effects of halogenated aromatic hydrocarbons (PubMed:). Involved in cell-cycle regulation (PubMed:). Likely to play an important role in the development and maturation of many tissues (PubMed:12213388). Regulates the circadian clock by inhibiting the basal and circadian expression of the corecircadian component PER1 (PubMed:). Inhibits PER1 by repressing the CLOCK-ARNTL/BMAL1 heterodimer mediated transcriptional activation of PER1. The heterodimer ARNT:AHR binds to core DNA sequence 5'-TGCGTG-3' within the dioxin response element (DRE) of target gene promoters and activates their transcription (PubMed:).
Cellular Location	Cytoplasm{ECO:0000250 UniProtKB:P30561}. Nucleus {ECO:0000250 UniProtKB:P30561}. Note=Initially cytoplasmic; upon binding with ligand and interaction with a HSP90, it translocates to the nucleus{ECO:0000250 UniProtKB:P30561}
Tissue Location	Expressed in all tissues tested including blood, brain, heart, kidney, liver, lung, pancreas and skeletal muscle.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)
All lanes : Anti-AHR Antibody (Center) at 1:500 dilution
Lane 1: Hela whole cell lysate
Lane 2: MCF-7 whole cell lysate
Lane 3: A549 whole cell lysate
Lane 4: PC-3 whole cell lysate
Lane 5: HepG2 whole cell lysate
Lane 6: C2C12 whole cell lysate
Lysates/proteins at 20 ug per lane.
Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.
Predicted band size : 96 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.

ADDITIONAL INFORMATION

Related Product Information for anti-AHR antibody	AHR is a ligand-activated transcription factor involved in the regulation of biological responses to planar aromatic hydrocarbons. This receptor has been shown to regulate xenobiotic-metabolizing enzymes such as cytochrome P450. Its ligands included a variety of aromatic hydrocarbons. [provided by RefSeq].
References	Davila, S., et al. Genes Immun. (2010) In press : Kalthoff, S., et al. J. Biol. Chem. 285(9):5993-6002(2010) Hall, J.M., et al. Mol. Endocrinol. 24(2):359-369(2010) Schroeder, J.C., et al. Biochemistry 49(2):393-400(2010)

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502003
NCBI GeneID	196
NCBI Accession #	NP_001612.1
NCBI GenBank Nucleotide #	NM_001621.4
UniProt Accession #	P35869; Q13728; Q13803; Q13804; A4D130
NCBI Official Full Name	aryl hydrocarbon receptor
NCBI Official Synonym Full Names	aryl hydrocarbon receptor
NCBI Official Symbol	AHR
NCBI Official Synonym Symbols	bHLHe76
NCBI Protein Information	aryl hydrocarbon receptor
UniProt Protein Name	Aryl hydrocarbon receptor
UniProt Gene Name	AHR
UniProt Synonym Gene Names	BHLHE76; Ah receptor; AhR; bHLHe76
UniProt Entry Name	AHR_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.