

Rabbit AHR Polyclonal Antibody | anti-AHR antibody

Anti-AHR Antibody

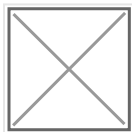
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA124893	Rabbit	Human, Mouse, Rat	Flow Cytometry, Functional Assay, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

AHR; Polyclonal Antibody; Anti-AHR Antibody; 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, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	No cross reactivity with other proteins.
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized
Sequence Length	848
Applicable Applications for anti-AHR antibody	FCM/FACS (Flow Cytometry), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human AHR (AFLNKFQNGVLNETYPAELNNINNTQTTTHLQPLHH).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Relevant Detection Systems	It is recommended to use an Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC-P, IHC-F and ICC.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohiostchemistry)

Figure 3. IHC analysis of AHR using anti-AHR antibody.AHR was detected in paraffin-embedded section of human cholangiocarcinoma tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-AHR antibody.AHR was detected in paraffin-embedded section of human cholangiocarcinoma tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-AHR antibody.AHR was detected in paraffin-embedded section of human oesophagus squama cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-AHR antibody.AHR was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-AHR antibody.AHR was detected in paraffin-embedded section of mouse liver tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-AHR antibody.AHR was detected in paraffin-embedded section of rat small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-AHR antibody.AHR was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-AHR antibody.Overlay histogram showing U87 cells stained with A00225-2 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-AHR antibody.Overlay histogram showing U937 cells stained with A00225-2 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-AHR Antibody for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of AHR using anti-AHR antibody.Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours.Lane 1: recombinant human AHR protein 1ng.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-AHR antigen affinity purified polyclonal antibody at 0.5 ug/ml overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for AHR at approximately 36KD. The expected band size for AHR is at 36KD.

ADDITIONAL INFORMATION

Related Product Information for anti-AHR antibody	Description: Rabbit IgG polyclonal antibody for AHR detection. Tested with WB, IHC-P, IHC-F, ICC, FCM in Human; Mouse; Rat. Background: AHR (aryl hydrocarbon receptor), also called bHLHe76, is a member of the family of basic helix-loop-helix transcription factors. AhR is a cytosolic transcription factor that is normally inactive, bound to several co-chaperones. The AHR gene is mapped on 7p21.1. Estrogenic actions of AHR agonists were detected in wildtype ovariectomized mouse uteri, but were absent in Ahr -/- or Er-alpha -/- ovariectomized mice. Complex assembly and ubiquitin ligase activity of CUL4B (AHR) in vitro and in vivo are dependent on the AHR ligand. In the CUL4B (AHR) complex, ligand-activated AHR acts as a substrate-specific adaptor component that targets sex steroid receptors for degradation. Cd4-positive cells from mice lacking Ahr developed Th17 responses but failed to produce Il22 and did not show enhanced Th17 development. Activation of Ahr during induction of EAE accelerated disease onset and increased pathology in wildtype mice, but not in Ahr -/- mice. The TDO-AHR pathway is active in human brain tumors and is associated with malignant progression and poor survival. Ahr activity within ROR-gamma-t-positive ILC could be induced by dietary ligands such as those contained in vegetables of the family Brassicaceae.
References	1. Andersson, P., McGuire, J., Rubio, C., Gradin, K., Whitelaw, M. L., Pettersson, S., Hanberg, A., Poellinger, L. A constitutively active dioxin/aryl hydrocarbon receptor induces stomach tumors. Proc. Nat. Acad. Sci. 99: 9990-9995, 2002. 2. Ema, M., Matsushita, N., Sogawa, K., Ariyama, T., Inazawa, J., Nemoto, T., Ota, M., Oshimura, M., Fujii-Kuriyama, Y. Human arylhydrocarbon receptor: functional expression and chromosomal assignment to 7p21. J. Biochem. 116: 845-851, 1994. 3. Le Beau, M. M., Carver, L. A., Espinosa, R., III, Schmidt, J. V., Bradfield, C. A. Chromosomal localization of the human AHR locus encoding the structural gene for the Ah receptor to 7p21-p15. Cytogenet. Cell Genet. 66: 172-176, 1994.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502003
NCBI GeneID	196
NCBI Accession #	NP_001612.1
NCBI GenBank Nucleotide #	NM_001621.5
UniProt Accession #	P35869; Q13728; Q13803; Q13804; A4D130
Molecular Weight	96,147 Da
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

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ahr-antibody-flow-cytometry-immunocytochemistry-immunohistochemistry-western-blot-elisa/124893>