

Product datasheet

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ARG41570 anti-Aryl Hydrocarbon Receptor antibody

Package: 50 μg Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes Aryl Hydrocarbon Receptor

Tested Reactivity Hu, Ms, Rat

Tested Application FACS, IHC-P

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name Aryl Hydrocarbon Receptor

Species Human

Immunogen Synthetic peptide corresponding to a sequence of Human Aryl Hydrocarbon Receptor.

(AFLNKFQNGVLNETYPAELNNINNTQTTTHLQPLHH)

Conjugation Un-conjugated

Alternate Names Aryl hydrocarbon receptor; AhR; Ah receptor; bHLHe76; Class E basic helix-loop-helix protein 76

Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	IHC-P	1:200 - 1:1000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.

Preservative 0.05% Sodium azide

Stabilizer 4% Trehalose

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Bioinformation

Gene Symbol AHR

Gene Full Name aryl hydrocarbon receptor

Background The protein encoded by this gene is a ligand-activated helix-loop-helix 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. Before ligand binding, the encoded protein is sequestered in the cytoplasm; upon ligand binding, this protein moves to the

nucleus and stimulates transcription of target genes. [provided by RefSeq, Sep 2015]

Function

Ligand-activated transcriptional activator. Binds to the XRE promoter region of genes it activates.

Activates the expression of multiple phase I and II xenobiotic chemical metabolizing enzyme genes

(such as the CYP1A1 gene). Mediates biochemical and toxic effects of halogenated aromatic hydrocarbons. Involved in cell-cycle regulation. Likely to play an important role in the development and maturation of many tissues. Regulates the circadian clock by inhibiting the basal and circadian expression of the core circadian component PER1. Inhibits PER1 by repressing the CLOCK-

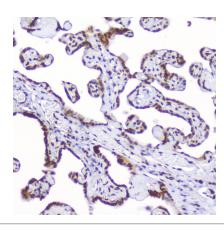
ARNTL/BMAL1 heterodimer mediated transcriptional activation of PER1. [UniProt]

Calculated Mw 96 kDa

Cellular Localization Cytoplasm. Nucleus. Note=Initially cytoplasmic; upon binding with ligand and interaction with a HSP90,

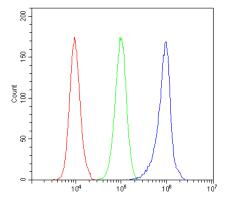
it translocates to the nucleus. [UniProt]

Images



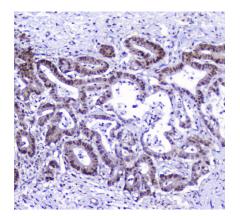
ARG41570 anti-Aryl Hydrocarbon Receptor antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41570 anti-Aryl Hydrocarbon Receptor antibody at 2 $\mu g/ml$ dilution, overnight at 4°C.



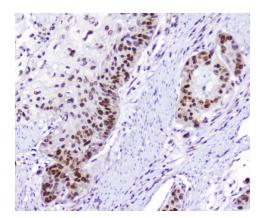
ARG41570 anti-Aryl Hydrocarbon Receptor antibody FACS image

Flow Cytometry: U87 cells were blocked with 10% normal Goat serum and then stained with ARG41570 anti-Aryl Hydrocarbon Receptor antibody (blue) at 1 $\mu g/10^6$ cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 $\mu g/10^6$ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



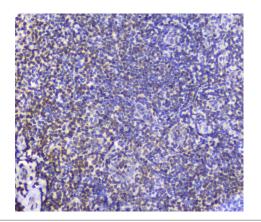
ARG41570 anti-Aryl Hydrocarbon Receptor antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human cholangiocarcinoma tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41570 anti-Aryl Hydrocarbon Receptor antibody at 2 $\mu g/ml$ dilution, overnight at 4°C.



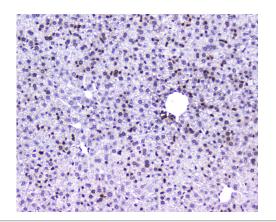
ARG41570 anti-Aryl Hydrocarbon Receptor antibody IHC-P image

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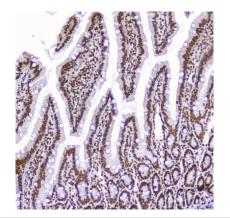
ARG41570 anti-Aryl Hydrocarbon Receptor antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41570 anti-Aryl Hydrocarbon Receptor antibody at 2 $\mu g/ml$ dilution, overnight at 4°C.



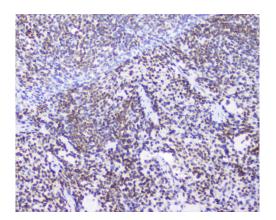
ARG41570 anti-Aryl Hydrocarbon Receptor antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse liver tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41570 anti-Aryl Hydrocarbon Receptor antibody at 2 $\mu g/ml$ dilution, overnight at 4°C.



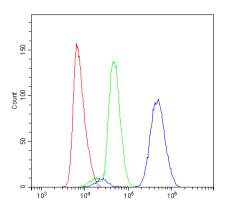
ARG41570 anti-Aryl Hydrocarbon Receptor antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat small intestine tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41570 anti-Aryl Hydrocarbon Receptor antibody at 2 μ g/ml dilution, overnight at 4°C.



ARG41570 anti-Aryl Hydrocarbon Receptor antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat spleen tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41570 anti-Aryl Hydrocarbon Receptor antibody at 2 $\mu g/ml$ dilution, overnight at 4°C.



ARG41570 anti-Aryl Hydrocarbon Receptor antibody FACS image

Flow Cytometry: U937 cells were blocked with 10% normal Goat serum and then stained with ARG41570 anti-Aryl Hydrocarbon Receptor antibody (blue) at 1 μ g/10^6 cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 μ g/10^6 cells) used under the same conditions. Unlabelled sample (red) was also used as a control.