

# Aryl Hydrocarbon Receptor Antibody / AHR

Catalog No: tcna10601



## Available Sizes

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**Size:** 100ug



## Specifications

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**Application:**

WB, IHC-P, FACS

**Species Reactivity:**

Human, Mouse, Rat

**Host Species:**

Rabbit

**Immunogen / Amino acids:**

Amino acids AFLNKFQNGVLNETYPAELNNINNTQTTTHLQPLHH were used as the immunogen for the AHR antibody.

**Clonality:**

Polyclonal (rabbit origin)

**Isotype:**

Rabbit IgG

**Storage Buffer:**

0.5mg/ml if reconstituted with 0.2ml sterile DI water

**Recommended Dilution:**

Western blot: 0.5-1ug/ml

IHC (FFPE): 1-2ug/ml

FACS: 1-3ug/10<sup>6</sup> cells

**Storage Instruction:**

After reconstitution, the AHR antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

**SwissProt:**

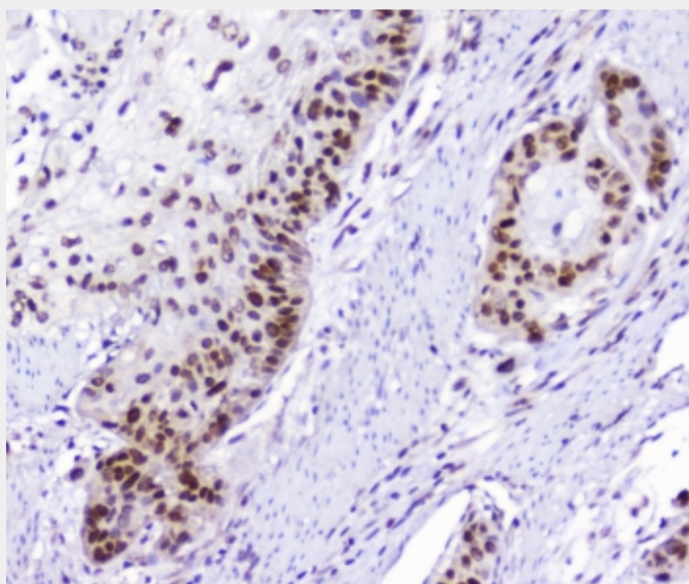
P35869

**References**

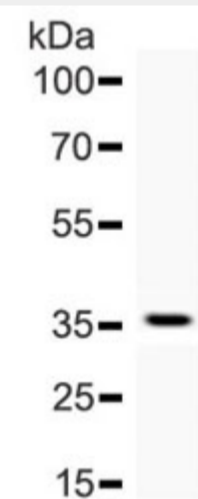
Antigen affinity purified

**Product Description**

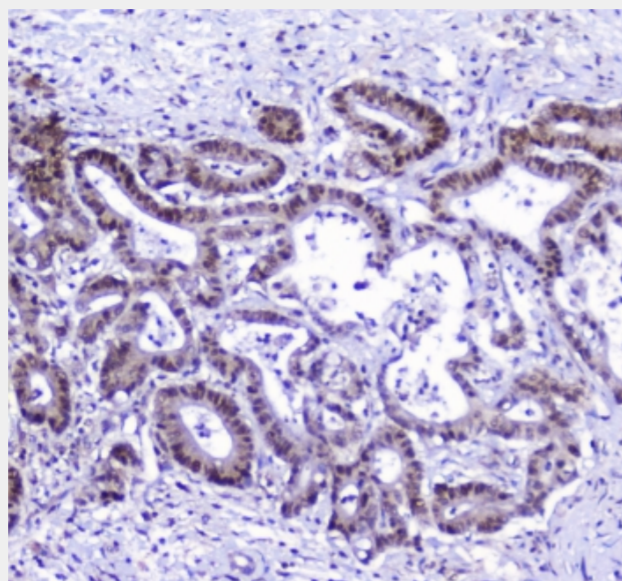
AHR (Aryl Hydrocarbon Receptor), also called bHLHe76, is a member of the family of basic helix-loop-helix transcription factors. AHR is a cytosolic transcription factor that is normally inactive, bound to several co-chaperones. The AHR gene is mapped on 7p21.1. Estrogenic actions of AHR agonists were 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.



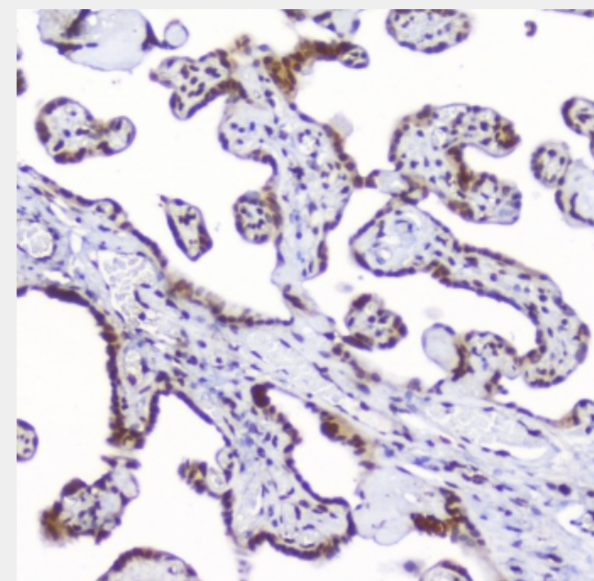
IHC staining of FFPE human esophagus squamous cancer with AHR antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



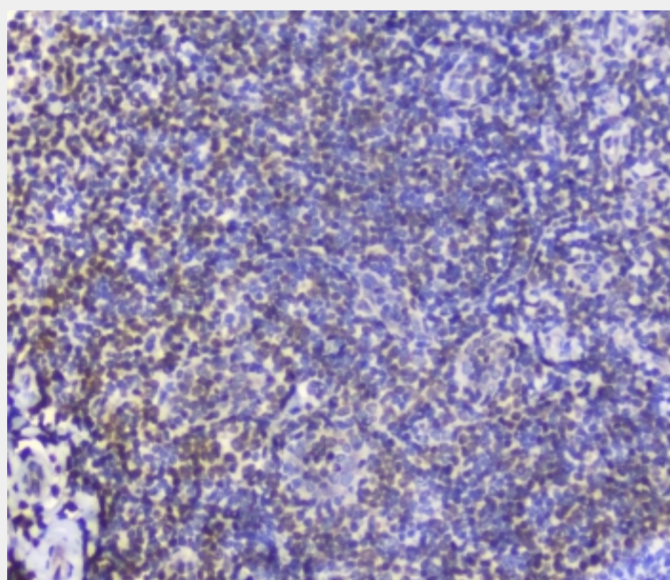
Western blot testing of human recombinant partial protein with AHR antibody.



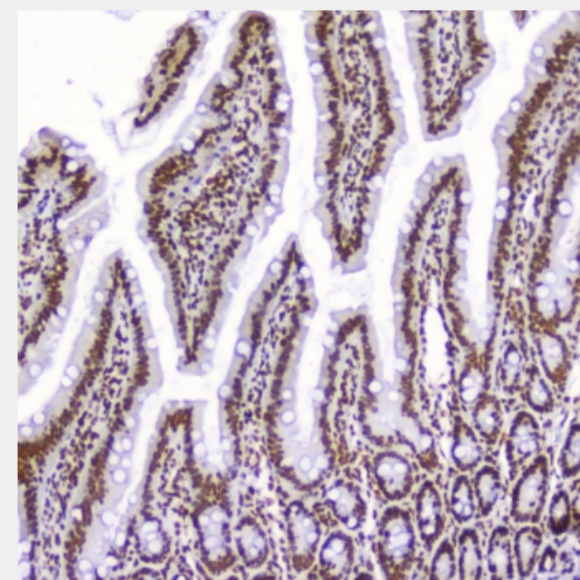
IHC staining of FFPE human cholangiocarcinoma with AHR antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



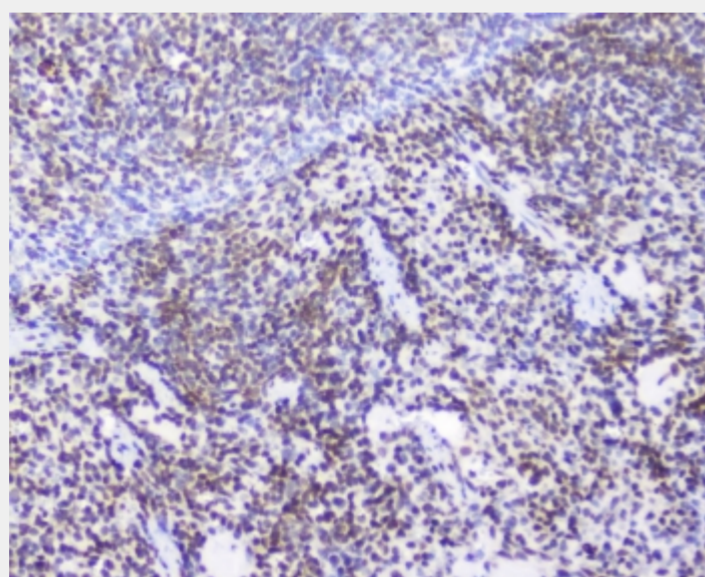
IHC staining of FFPE human placenta with AHR antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



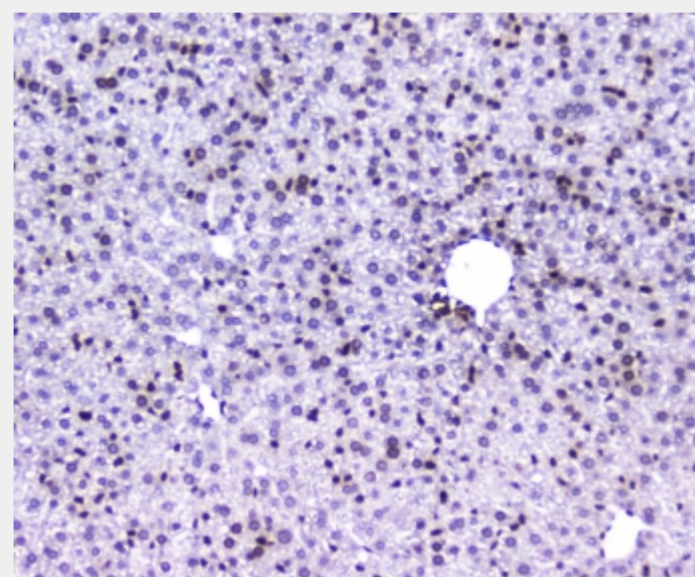
IHC staining of FFPE human tonsil with AHR antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



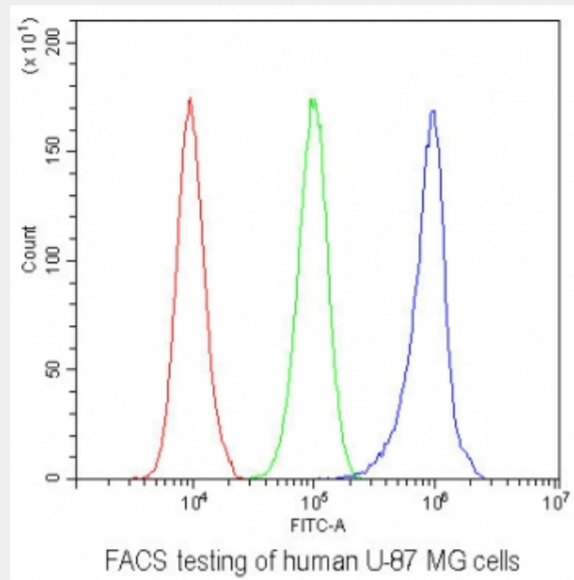
IHC staining of FFPE rat small intestine with AHR antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



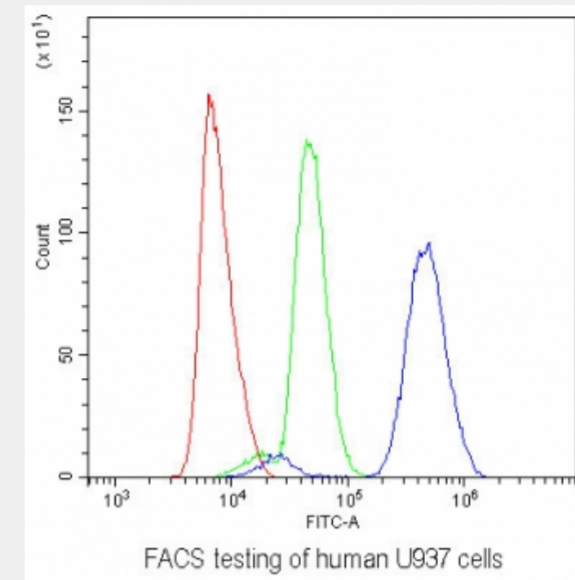
IHC staining of FFPE rat spleen with AHR antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



IHC staining of FFPE mouse liver with AHR antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



FACS testing of human U-87 MG cells with AHR antibody at 1ug/10<sup>6</sup> cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= AHR antibody.



FACS testing of human U937 cells with AHR antibody at 1ug/10<sup>6</sup> cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= AHR antibody.

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!