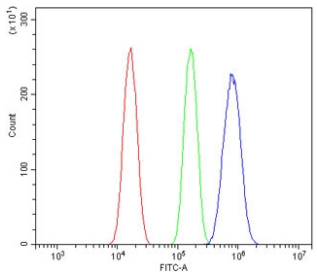
Ah Receptor Antibody / Aryl hydrocarbon Receptor (RQ6035)

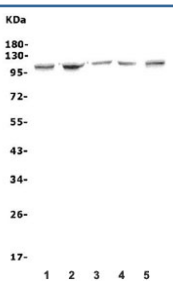
Catalog No.	Formulation	Size
RQ6035	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P41738
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Ah Receptor antibody is available for research use only.



Flow cytometry testing of mouse Neuro-2a cells with Ah Receptor antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Ah Receptor antibody.



Western blot testing of 1) rat liver, 2) rat PC-12, 3) rat C6, 4) rat RH-35 and 5) mouse liver lysate with Ah Receptor antibody. Predicted molecular weight ~95 kDa.

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.

Application Notes

Optimal dilution of the Ah Receptor antibody should be determined by the researcher.

Immunogen

Recombinant rat protein (amino acids R15-Q196) was used as the immunogen for the Ah Receptor antibody.

Storage

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