# Aryl hydrocarbon Receptor Rabbit mAb [ULVQ]

Cat NO. :A28618

# Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB	н	P35869	105 kDa	Rabbit	lgG	100ul,200ul

## **Applications detail:**

# Application Dilution WB 1:1000-2000 The optimal dilutions should be determined by the end user

## Conjugate:

UnConjugate

Form:

Liquid

#### sensitivity:

Endogenous

# **Purification**:

Protein A purification

#### Specificity:

Antibody is produced by immunizing animals with a synthetic peptide at the sequence of human Aryl hydrocarbon Receptor

#### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

#### **Tissue specificity:**

Expressed in all tissues tested including blood, brain, heart, kidney, liver, lung, pancreas and skeletal muscle.

Expressed in retinal photoreceptors (PubMed:29726989)..

Subcellular location:

Cytoplasm. Nucleus.

**Function**:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/ Immunofluorescence F: Flow Cvtometry

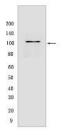
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse

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Ligand-activated transcription factor that enables cells to adapt to changing conditions by sensing compounds from the environment, diet, microbiome and cellular metabolism, and which plays important roles in development, immunity and cancer (PubMed:30373764, PubMed:23275542, PubMed:7961644, PubMed:32818467). Upon ligand binding, translocates into the nucleus, where it heterodimerizes with ARNT and induces transcription by binding to xenobiotic response elements (XRE) (PubMed:30373764, PubMed:23275542, PubMed: 7961644). Regulates a variety of biological processes, including angiogenesis, hematopoiesis, drug and lipid metabolism, cell motility and immune modulation (PubMed:12213388). Xenobiotics can act as ligands: upon xenobiotic-binding, activates the expression of multiple phase I and II xenobiotic chemical metabolizing enzyme genes (such as the CYP1A1 gene) (PubMed:7961644). Mediates biochemical and toxic effects of halogenated aromatic hydrocarbons (PubMed: 7961644). Next to xenobiotics, natural ligands derived from plants, microbiota, and endogenous metabolism are potent AHR agonists (PubMed:18076143). Tryptophan (Trp) derivatives constitute an important class of endogenous AHR ligands (PubMed:32866000, PubMed:32818467). Acts as a negative regulator of anti-tumor immunity: indoles and kynurenic acid generated by Trp catabolism act as ligand and activate AHR, thereby promoting AHR-driven cancer cell motility and suppressing adaptive immunity (PubMed:32818467). Regulates the circadian clock by inhibiting the basal and circadian expression of the core circadian component PER1 (PubMed:28602820). Inhibits PER1 by repressing the CLOCK-ARNTL/BMAL1 heterodimer mediated transcriptional activation of PER1 (PubMed:28602820). 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:28602820)..

# Validation Data:

# Aryl hydrocarbon Receptor Rabbit mAb [ULVQ] Images



Western blot (SDS PAGE) analysis of extracts from Wild type HAP1 cells.Using Aryl hydrocarbon ReceptorRabbit mAb [ULVQ] at dilution of 1:1000 incubated at  $4^{\circ}$ C over

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IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.