



Ah Receptor Polyclonal Antibody

Catalog No	YP-Ab-01522
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	AHR
Protein Name	Aryl hydrocarbon receptor
Immunogen	The antiserum was produced against synthesized peptide derived from human AhR. AA range:2-51
Specificity	Ah Receptor Polyclonal Antibody detects endogenous levels of Ah Receptor protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AHR; BHLHE76; Aryl hydrocarbon receptor; Ah receptor; AhR; Class E basic helix-loop-helix protein 76; bHLHe76; AHRR; BHLHE77; KIAA1234; Aryl hydrocarbon receptor repressor; AhR repressor; AhRR; Class E basic helix-loop-helix protein 77; bHL
Observed Band	96kD
Cell Pathway	Cytoplasm . Nucleus . Initially cytoplasmic; upon binding with ligand and interaction with a HSP90, it translocates to the nucleus. .
Tissue Specificity	Expressed in all tissues tested including blood, brain, heart, kidney, liver, lung, pancreas and skeletal muscle. Expressed in retinal photoreceptors (PubMed:29726989).
Function	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.,induction:Induced or repressed by TGF-beta and dioxin in a cell-type specific fashion. Repressed by cAMP, retinoic acid, and TPA.,similarity:Contains 1 basic helix-loop-helix (bHLH)



domain.,similarity:Contains 1 PAC (PAS-associated C-terminal)
domain.,similarity:Contains 2 PAS (PER-ARNT-SIM) domains.,subcellular
location:Initially cytoplasmic; upon binding with ligand and interaction with a
HSP90, it translocates to the nucleus.,subunit:Bounds MYBBP1A (By similarity)

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],

matters needing attention

Avoid repeated freezing and thawing!

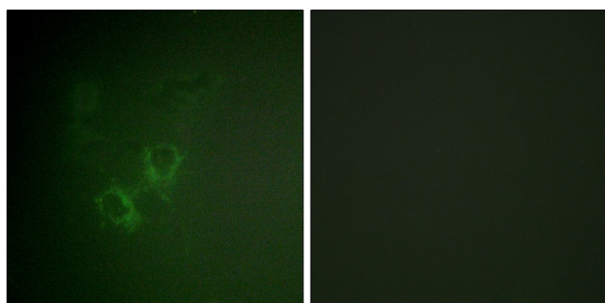
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

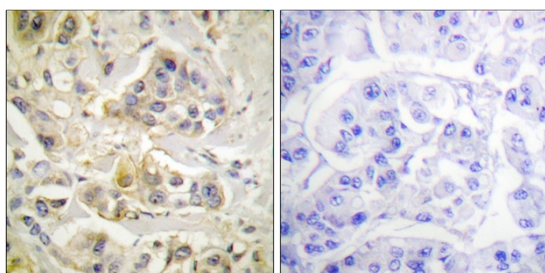
Products Images



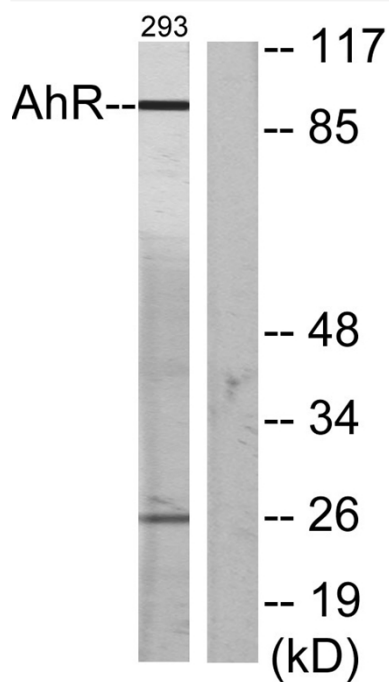
Western Blot analysis of various cells using Ah Receptor Polyclonal Antibody



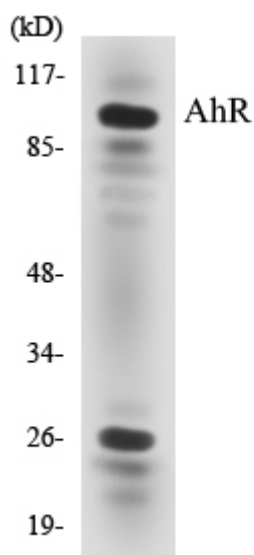
Immunofluorescence analysis of HeLa cells, using AhR Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using AhR Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using AhR Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HT-29 cells using AhR antibody.