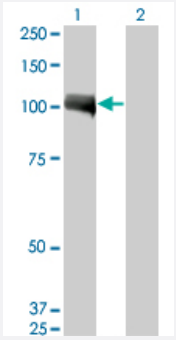
AHR monoclonal antibody (M02), clone 3B12

Catalog # H00000196-M02 Size 100 ug

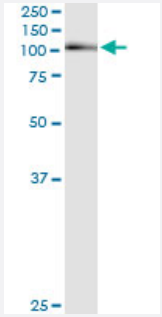
Applications



Western Blot (Transfected lysate)

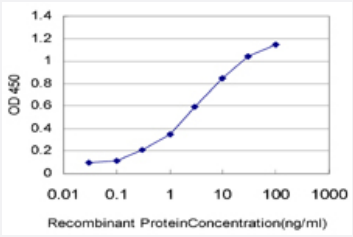
Western Blot analysis of AHR expression in transfected 293T cell line by AHR monoclonal antibody (M02), clone 3B12.

Lane 1: AHR transfected lysate(96.147 KDa).
Lane 2: Non-transfected lysate.



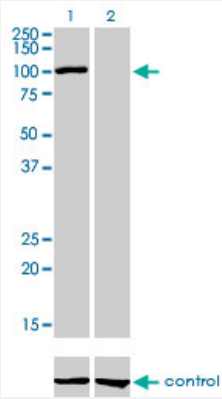
Immunoprecipitation

Immunoprecipitation of AHR transfected lysate using anti-AHR monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with AHR MaxPab rabbit polyclonal antibody.



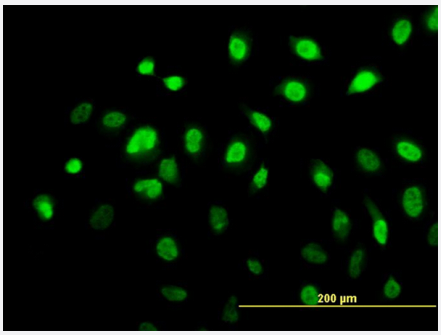
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged AHR is approximately 0.03ng/ml as a capture antibody.



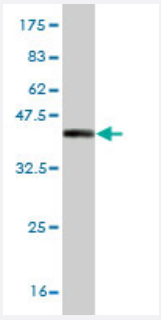
RNAi Knockdown (Antibody validated)

Western blot analysis of AHR over-expressed 293 cell line, cotransfected with AHR Validated Chimera RNAi (Cat # H00000196-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with AHR monoclonal antibody (M02), clone 3B12 (Cat # H00000196-M02). GAPDH (36.1 kDa) used as specificity and loading control.



Immunofluorescence

Immunofluorescence of monoclonal antibody to AHR on HeLa cell. [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (36.74 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant AHR.
Immunogen	AHR (NP_001612, 721 a.a. ~ 820 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MGSFEPSPYPTTSSLEDFVTCLQLPENQKHGLNPQSAIITPQTCYAGAVSMYQCQPEPQHTHVGQMQYNPVLPGQQAFLNKFQNGVLNETYPAELNNINN
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (65)

Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

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  Lane 2: Non-transfected lysate.

  Protocol Download

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  Protocol Download

- Immunoprecipitation

  Immunoprecipitation of AHR transfected lysate using anti-AHR monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with AHR MaxPab rabbit polyclonal antibody.

  Protocol Download

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- ELISA

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  Protocol Download

- Immunofluorescence

  Immunofluorescence of monoclonal antibody to AHR on HeLa cell. [antibody concentration 10 ug/ml]

Gene Info — AHR

Entrez GeneID	196
GeneBank Accession#	NM_001621
Protein Accession#	NP_001612
Gene Name	AHR
Gene Alias	bHLHe76
Gene Description	aryl hydrocarbon receptor
Omim ID	600253
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a ligand-activated 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. Its ligands included a variety of aromatic hydrocarbons. [provided by RefSeq
Other Designations	AH-receptor|aromatic hydrocarbon receptor

Publication Reference

- Protective effects of coffee against oxidative stress induced by the tobacco carcinogen benzo[α]pyrene.

  Kalthoff S, Landerer S, Reich J, Strassburg CP.

  Free Radical Biology & Medicine 2017 Mar; 108:66.

  Application: WB-Ti, Mouse, Mouse colon, jejunum, liver

- Cross-talk between Aryl Hydrocarbon Receptor and the inflammatory response: a Role for NF-κB.

  Vogel CF, Khan EM, Leung PS, Gershwin ME, Chang WL, Wu D, Haarmann-Stemmann T, Hoffmann A, Denison MS.

  The Journal of Biological Chemistry 2014 Jan; 289(3):1866.

  Application: WB-Ce, Human, Mouse, Dendritic, MEF cells

- Gender matters: estrogen receptor alpha (ERα) and histone deacetylase (HDAC) 1 and 2 control the gender-specific transcriptional regulation of human uridine diphosphate glucuronosyltransferases genes (UGT1A).

  Kalthoff S, Winkler A, Freiberg N, Manns MP, Strassburg CP.

  Journal of Hepatology 2013 Oct; 59(4):797.

  Application: ChIP, Human, SW403, KYSE70 cells

- Malassezia-derived indoles activate the aryl hydrocarbon receptor and inhibit Toll-like receptor-induced maturation in monocyte-derived dendritic cells.

  Vlachos C, Schulte BM, Magiatis P, Adema GJ, Gaitanis G.

  The British Journal of Dermatology 2012 Sep; 167(3):496.

  Application: IF, WB, Human, Human monocyte-derived dendritic cells

- Diminished carcinogen detoxification is a novel mechanism for hypoxia-inducible factor 1-mediated genetic instability.

  Schults MA, Timmermans L, Godschalk RW, Theys J, Wouters BG, van Schooten FJ, Chiu RK.

  The Journal of Biological Chemistry 2010 May; 285(19):14558.

  Application: WB-Ce, Human, A-549 cells

Disease

- Abnormalities
- Adenocarcinoma
- Alzheimer disease
- Breast cancer
- Breast Neoplasms
- Carcinoma
- Cardiovascular Diseases
- Cleft Lip
- Cleft Palate
- Colorectal Neoplasms
- Dementia
- Diabetes Complications

- Disease Susceptibility
- DNA Damage
- Endometriosis
- Esophageal Neoplasms
- Genetic Predisposition to Disease
- Hypertension
- Infertility
- Kidney Failure
- Laryngeal Neoplasms
- Lung carcinoma
- Lung Neoplasms
- Lymphoma
- Macular Degeneration
- Metabolic Syndrome X
- Micronuclei
- Multiple Myeloma
- Neoplasms
- Occupational Diseases
- Oligospermia
- Osteoporosis
- Prostate cancer
- Pulmonary Disease
- Stomach Neoplasms
- Urinary Bladder Neoplasms
- Werner syndrome