

**ARNT Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a partial recombinant ARNT.****Catalog # AT1199a****Specification**

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**ARNT Antibody (monoclonal) (M01) - Product Information**

Application	IF, WB, IHC, E
Primary Accession	<a href="#">P27540</a>
Other Accession	<a href="#">BC060838</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	86636

**ARNT Antibody (monoclonal) (M01) - Additional Information****Gene ID** 405**Other Names**

Aryl hydrocarbon receptor nuclear translocator, ARNT protein, Class E basic helix-loop-helix protein 2, bHLHe2, Dioxin receptor, nuclear translocator, Hypoxia-inducible factor 1-beta, HIF-1-beta, HIF1-beta, ARNT, BHLHE2

**Target/Specificity**

ARNT (AAH60838, 1 a.a. ~ 110 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution**

WB~~1:500~1000

**Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

**Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions**

ARNT Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

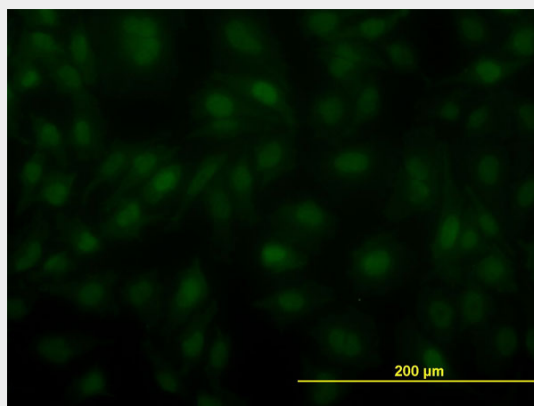
**ARNT Antibody (monoclonal) (M01) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

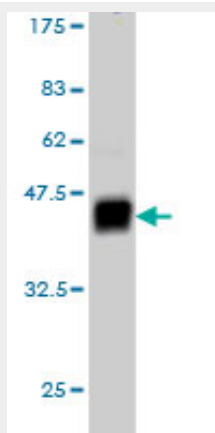
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

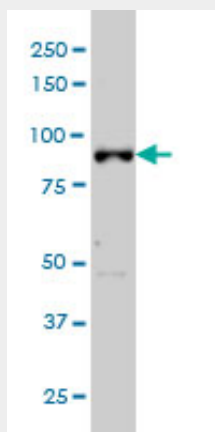
#### ARNT Antibody (monoclonal) (M01) - Images



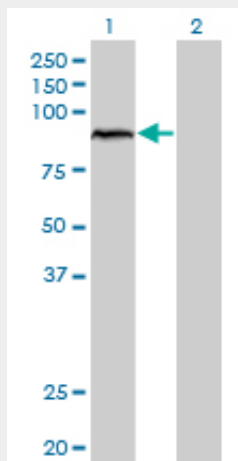
Immunofluorescence of monoclonal antibody to ARNT on HeLa cell. [antibody concentration 10 ug/ml]



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.73 KDa) .



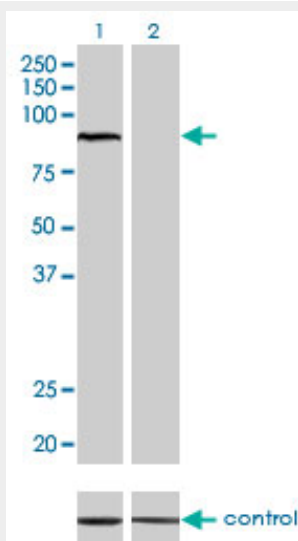
ARNT monoclonal antibody (M01), clone 3D10 Western Blot analysis of ARNT expression in Hela S3 NE ( (Cat # AT1199a )



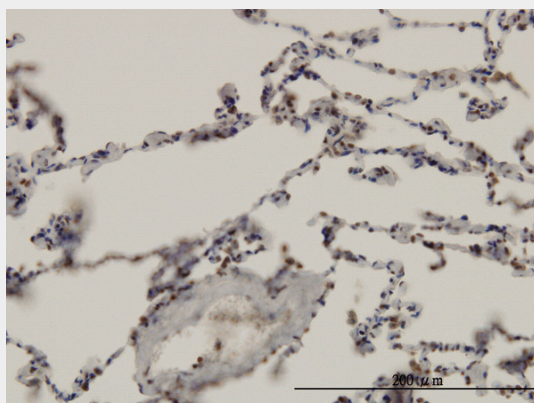
Western Blot analysis of ARNT expression in transfected 293T cell line by ARNT monoclonal antibody (M01), clone 3D10.

Lane 1: ARNT transfected lysate(86.6 KDa).

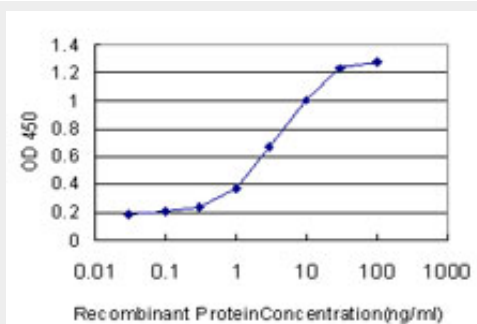
Lane 2: Non-transfected lysate.



Western blot analysis of ARNT over-expressed 293 cell line, cotransfected with ARNT Validated Chimera RNAi ( (Cat # AT1199a )



Immunoperoxidase of monoclonal antibody to ARNT on formalin-fixed paraffin-embedded human lung. [antibody concentration 3 ug/ml]



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

### ARNT Antibody (monoclonal) (M01) - Background

The aryl hydrocarbon (Ah) receptor is involved in the induction of several enzymes that participate in xenobiotic metabolism. The ligand-free, cytosolic form of the Ah receptor is complexed to heat shock protein 90. Binding of ligand, which includes dioxin and polycyclic aromatic hydrocarbons, results in translocation of the ligand-binding subunit only to the nucleus. Induction of enzymes involved in xenobiotic metabolism occurs through binding of the ligand-bound Ah receptor to xenobiotic responsive elements in the promoters of genes for these enzymes. This gene encodes a protein that forms a complex with the ligand-bound Ah receptor, and is required for receptor function. The encoded protein has also been identified as the beta subunit of a heterodimeric transcription factor, hypoxia-inducible factor 1 (HIF1). A t(1;12)(q21;p13) translocation, which results in a TEL-ARNT fusion protein, is associated with acute myeloblastic leukemia. Three alternatively spliced variants encoding different isoforms have been described for this gene.

### ARNT Antibody (monoclonal) (M01) - References

Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891. Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. MicroRNA-101 negatively regulates Ezh2 and its expression is modulated by androgen receptor and HIF-1alpha/HIF-1beta. Cao P, et al. Mol Cancer, 2010 May 17. PMID 20478051. A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000. Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.