

Datasheet: VMA00963

Description:	MOUSE ANTI ARNT
Specificity:	ARNT
Format:	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
Clone:	E01/1H8
Isotype:	lgG1
Quantity:	100 μΙ

## **Product Details**

#### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Immunoprecipitation	•			
Western Blotting				1/1000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click <a href="here">here</a> to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

Target Species	Human	
Product Form	Purified IgG - Liquid	
Preparation	Mouse monoclonal antibody affinity purified on Protein G from	tissue culture supernatant
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide	
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml	
Immunogen	E. coli-derived recombinant protein of amino acids 469-789 of	human ARNT

# External Database

Links

**UniProt:** 

P27540 Related reagents

**Entrez Gene:** 

405 ARNT Related reagents

**Synonyms** 

BHLHE2

**Fusion Partners** 

Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0

myeloma cell line

**Specificity** 

Mouse anti ARNT antibody recognizes aryl hydrocarbon receptor nuclear translocator, also known as HIF1-beta, bHLHe2. ARNT is a transcription factor which predominantly binds HIF1-alpha or aryl hydrocarbon receptor, forming the heterodimer complex HIF1 which regulates expression of genes involved with a variety of physiological and pathological processes (Wu et al. 2018). Genes activated by HIF have a hypoxia-response element (HRE) within their promoter or enhancer. In this way, ARNT participates in the cellular response to reduced oxygen concentration (Mandl and Depping 2017). Under varying oxygen concentrations in cellular microenvironments, ARNT can also promote cell survival and angiogenesis (Shieh et al. 2014). In cancer, ARNT regulates tumorigenesis by activating genes involved with tumor growth and angiogenesis. Accordingly, ARNT expression has been identified in a range of cancer types and has been suggested as a prognostic biomarker and a target for cancer therapies (Huang et al. 2015).

Western Blotting	Mouse anti ARNT detects a band of approximately 94 kDa in MCF-7 cell lysates
Storage	Store undiluted at -20°C, avoiding repeated freeze thaw cycles
Guarantee	12 months from date of despatch
Acknowledgements	PrecisionAb is a trademark of Bio-Rad Laboratories
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/VMA00963">https://www.bio-rad-antibodies.com/SDS/VMA00963</a> Antibody (10040)
Regulatory	For research purposes only

## Related Products

**Recommended Secondary Antibodies** 

Goat Anti Mouse IgG (H/L) (STAR207...) HRP

**Recommended Negative Controls** 

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M429295:240410'

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