Datasheet: MCA5644

BATCH NUMBER 159203

Description:	MOUSE ANTI HUMAN HIF1 ALPHA
Specificity:	HIF1 ALPHA
Other names:	HYPOXIA-INDUCIBLE FACTOR 1-ALPHA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	Halpha111a
Isotype:	IgG2a
Quantity:	0.2 mg

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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Paraffin (1)	▪			1/25
Western Blotting	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1)**This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.**

EDTA pH9.0 is recommended for this purpose.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN_3)

Stabilisers	
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant human HIF1 alpha.
External Database Links	**UniProt:** Q16665 Related reagents **Entrez Gene:** 3091 HIF1A Related reagents
Synonyms	BHLHE78, MOP1, PASD8
RRID	AB_10671910
Specificity	**Mouse anti Human HIF1 alpha antibody, clone Halpha111a** recognizes human Hypoxia-inducible factor 1-alpha otherwise known as HIF1 alpha (HIF1A) or ARNT interacting protein, a widely expressed bHLH-PAS transcription factor, which acts as a critical regulatory protein in the host response to hypoxia (Kubis *et al.* 2005). HIF1A and HIF1B, also known as ARNT form the highly-conserved heterodimeric HIF-1 transcriptional complex (Carmeliet *et al.* 1998). During hypoxic conditions, HIF1A accumulates in the nucleus and activates the transcription of many genes encoding proteins involved in the production of oxygen delivery and metabolic adaptation, such as those for vascular endothelial growth factor (VEGFA) . Under normal oxygen conditions, HIF1A is targeted by hypoxia inducible factor prolyl-hydroxylases, followed by rapid protease degradation, which is inhibited during hypoxia (Hirsilä *et al.* 2003). Overexpression of HIF1A occurs in many common human cancers, including pancreatic, bladder and renal carcinomas (Shibaji *et al.* 2003). Mouse anti Human HIF1α, clone Halpha111a has been successfully used for the identifcation of HIF1α in human samples by both immunohistochemistry and western blotting.
Histology Positive Control Tissue	Human tonsil
Further Reading	1. Semenza, G.L. (2000) HIF-1 and human disease: one highly involved factor. Genes Dev. 14 (16): 1983-91.
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA5644 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR76...)	RPE
Human Anti Mouse IgG2a (HCA037...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®680, DyLight®800, FITC, HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR9...)	FITC

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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

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