

Datasheet: MCA5695

Description:	MOUSE ANTI HUMAN HIF1 ALPHA
Specificity:	HIF1 ALPHA
Other names:	HYPOXIA-INDUCIBLE FACTOR 1-ALPHA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	ESEE122
Isotype:	IgG1
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)	▪			1/100 - 1/500
ELISA	▪			
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 Stabilisers	0.09% Sodium Azide (NaN ₃)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant human HIF1 alpha
External Database Links	<p>UniProt: Q16665 Related reagents</p> <p>Entrez Gene: 3091 HIF1A Related reagents</p>
Synonyms	BHLHE78, MOP1, PASD8
RRID	AB_10889742
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the NS-1 myeloma cell line.
Specificity	<p>Mouse anti Human HIF1 alpha antibody, clone ESEE122 recognizes human HIF1α, also known as Hypoxia-inducible factor 1-alpha, ARNT-interacting protein, Basic-helix-loop-helix-PAS protein MOP1, Class E basic helix-loop-helix protein 78, Member of PAS protein 1 or PAS domain-containing protein 8. HIF1α is a widely expressed bHLH and PAS domain containing transcription factor, a critical regulatory protein in the host response to hypoxia.</p> <p>HIF1α interacts with the HIF1β/ARNT subunit to form the highly-conserved heterodimeric HIF-1 transcriptional complex. During hypoxic conditions, HIF1α translocated from a normoxic cytoplasmic location to the nucleus and activates transcription of several genes including erythropoietin, VEGF and glucose transporters, encoding proteins involved in oxygen delivery and metabolic adaptation to hypoxia. Under normal oxygen conditions, HIF1α is targeted by HIF prolyl-hydroxylase, followed by rapid proteolytic degradation. Overexpression of HIF1α occurs in many common human cancers, including pancreatic, bladder and renal carcinomas (Semenza 2003).</p> <p>Mouse anti Human HIF1 alpha antibody, clone ESEE122 has been shown to be suitable for the staining of snap-frozen cell pellets (Talks. et al. 2000).</p>
Histology Positive Control Tissue	Human tonsil
Western Blotting	MCA5695 detects a band of approximately 135 kDa in 0.1% hypoxia HeLa cell lysates ⁽¹⁾
References	1. Talks, K.L. <i>et al.</i> (2000) The expression and distribution of the hypoxia-inducible factors HIF-1alpha and HIF-2alpha in normal human tissues, cancers, and tumor-associated macrophages. Am J Pathol. 157 (2): 411-21.

Further Reading 1. Semenza, G.L. (2000) HIF-1 and human disease: one highly involved factor. [Genes Dev. 14 \(16\): 1983-91.](#)

Storage Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South Tel: +1 800 265 7376

America 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

'M373917:201013'

Printed on 18 Jan 2021

© 2021 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)