

Datasheet: MCA5695GA

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:	0.1 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)	■			
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 G 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 1.0mg/ml
Immunogen	Recombinant human HIF1 alpha

External Database Links	UniProt: Q16665 Related reagents
	Entrez Gene: 3091 HIF1A Related reagents
Synonyms	BHLHE78, MOP1, PASD8
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the NS-1 myeloma cell line.
Specificity	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. 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). 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).
Histology Positive Control Tissue	Human tonsil
Western Blotting	MCA5695GA detects a band of approximately 135kDa 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.
Shelf Life	18 months from the 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 (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP

Recommended Negative Controls

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

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
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Printed on 05 May 2018