Datasheet: MCA2888GA

Description:	MOUSE ANTI HUMAN PROLYL HYDROXYLASE 1
Specificity:	PROLYL HYDROXYLASE 1
Other names:	PHD1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	PHD112/G7
Isotype:	IgM
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)	▪			
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 protein digestion pre-treatment of paraffin sections e.g. trypsin or pronase.**

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)
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Full length human PHD1 recombinantly expressed.
External Database Links	**UniProt:** Q96KS0 Related reagents

	Entrez Gene: 112398 EGLN2 Related reagents
Synonyms	EIT6
Specificity	**Mouse anti Human Prolyl Hydroxylase 1 antibody, clone PHD112/G7** recognizes human prolyl hydroxylase 1 (PHD1), a ~44 kDa enzyme expressed abundantly in all tissues with the highest expression in testis. Hypoxia inducible factor-1 (HIF-1) is a transcriptional complex, consisting of an alpha and beta subunit, which plays a key role in coordinating the cellular response to hypoxia. During normal oxygen conditions, the alpha subunit of HIF-1 is rapidly degraded, however when hypoxia occurs this degradation is suppressed and HIF-1 activates the transcription of various genes important for survival and adaptation to hypoxia. Prolyl hydroxylase 1 catalyses the hydroxylation of specific prolyl residues within the HIF-1 alpha subunit, thereby targeting this subunit for degradation. Prolyl hydroxylase 1 might also play a role in the regulation of cell growth.
Histology Positive Control Tissue	Human testis
References	1. Appelhoff, R.J. *et al.* (2004) Differential function of the prolyl hydroxylases PHD1, PHD2, and PHD3 in the regulation of hypoxia-inducible factor. J Biol Chem. 279: 38458-65. 2. Boddy, J.L. *et al.* (2005) The androgen receptor is significantly associated with vascular endothelial growth factor and hypoxia sensing via hypoxia-inducible factors HIF-1a, HIF-2a, and the prolyl hydroxylases in human prostate cancer. Clin Cancer Res. 11: 7658-63.
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 IgM (STAR86...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgM (STAR138...)	Alk. Phos.
Human Anti Mouse IgM (HCA040...)	FITC, HRP

Recommended Negative Controls

MOUSE IgM NEGATIVE CONTROL (MCA692)

Recommended Useful Reagents

HISTAR DETECTION SYSTEM (STAR3000B)

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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