

Datasheet: MCA5684

Description:	MOUSE ANTI HUMAN OCT4
Specificity:	OCT4
Other names:	OCT3, POU5F1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	PR-1A6
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
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA	■			1:1000 - 1:5000
Immunoprecipitation			■	
Western Blotting	■			1:1000 - 1:5000
Immunofluorescence			■	

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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by protein G chromatography from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant human OCT4 (aa 1-212) expressed in <i>E. coli</i> and refolded to soluble form.
External Database	UniProt:

Links

[Q01860](#) [Related reagents](#)

Entrez Gene:

[5460](#) POU5F1 [Related reagents](#)

Synonyms

OCT3, OCT4, OTF3

Specificity

Mouse anti Human OCT4 antibody, clone PR-1A6 recognizes human OCT4, also known as Octamer-binding transcription factor 3, OCT3 and POU5F1, a 38.6kDa transcription factor belonging to the POU transcription factor family. OCT4 forms a trimeric complex with SOX2 on DNA and controls the expression of a number of genes involved in embryonic development including YES1, FGF4, UTF1 and ZFP206. It is critical for early embryogenesis and for embryonic stem cell pluripotency. OCT4 expression is commonly used as a marker for undifferentiated stem cells and has been used, in conjunction with other key transcription factors, to reprogram somatic cells into induced pluripotent stem cells.

References

1. Xiang, R. *et al.* (2011) Downregulation of transcription factor SOX2 in cancer stem cells suppresses growth and metastasis of lung cancer. [Br J Cancer. 104: 1410-7.](#)

Further Reading

1. Sternecker, J. *et al.* (2012) Concise review: Oct4 and more: the reprogramming expressway. [Stem Cells. 30 \(1\): 15-21.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. 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 date of despatch.

Acknowledgements

“For Research Use Only”

"This product is to be used for research purposes only and is not intended for diagnostic use. The purchase of this product conveys to the end-user the non-transferable right to use the purchased products and the components of the product in research conducted by the buyer. The buyer will not reformulate the Product and shall not sell or otherwise transfer this product, its components, or materials made therefrom to any third party. Buyer shall not use this product or its components for commercial purposes until it has obtained a license for this purpose. The term “commercial purposes” shall mean any activity by a party for consideration and may include, but is not limited to, use of the product or its components (i) in manufacturing, (ii) to provide a service, information or data to a third party (e.g. fee for sample testing), (iii) for therapeutic, diagnostic or prophylactic purposes, (iv) for resale, whether or not such product or its components are resold for use in research, or (v) in a quality control or quality assurance process for the manufacture of a product for sale. The use of this product by the buyer constitutes agreement with the terms of this limited use label license for Bio-Rad Ltd.”

Health And Safety Information

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

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 \(MCA928\)](#)

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'M313852:180403'

Printed on 03 Apr 2018
