

Datasheet: MCA1946

Description:	RAT ANTI M31/HP1
Specificity:	M31
Other names:	HETEROCHROMATIN PROTEIN 1 HOMOLOG BETA
Format:	S/N
Product Type:	Monoclonal Antibody
Clone:	MAC353
Isotype:	IgG2b
Quantity:	2 ml

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	■			Neat - 1/50
Immunohistology - Paraffin			■	
ELISA	■			
Immunoprecipitation	■			
Western Blotting	■			
Immunofluorescence	■			
Chromatin Immunoprecipitation	■			

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Species Cross Reactivity	Reacts with: Human N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Tissue Culture Supernatant - liquid
Preservative Stabilisers	0.1% Sodium Azide (NaN ₃)
Immunogen	71 amino acid fusion protein corresponding to the C-terminal region of M31
External Database Links	UniProt: P83917 Related reagents

Entrez Gene:[12412](#) Cbx1 [Related reagents](#)

Synonyms	Cbx
Specificity	Rat anti Mouse M31 antibody, clone MAC353 recognises the M31 molecule in mouse and the homologous Chromobox protein homolog 1 or HP1Hsbeta molecule in man. Rat anti Mouse M31 antibody, clone MAC353 has been reported for use in western blotting and recognises a ~26 kDa protein in murine and human nuclear extracts (Wreggett et al. 1994).
References	1. Wreggett, K.A. et al. (1994) A mammalian homologue of <i>Drosophila</i> heterochromatin protein 1 (HP1) is a component of constitutive heterochromatin. Cytogenet Cell Genet. 66 (2): 99-103. 2. Sabbattini, P. et al. (2007) A novel role for the Aurora B kinase in epigenetic marking of silent chromatin in differentiated postmitotic cells. EMBO J. 26 (22): 4657-69. 3. Epsztejn-Litman, S. et al. (2008) <i>De novo</i> DNA methylation promoted by G9a prevents reprogramming of embryonically silenced genes. Nat Struct Mol Biol. 15: 1176-83. 4. Matsui, T. et al. (2010) Proviral silencing in embryonic stem cells requires the histone methyltransferase ESET. Nature. 464: 927-31. 5. Frohnert, C. et al. (2011) SPAG4L/SPAG4L-2 are testis-specific SUN domain proteins restricted to the apical nuclear envelope of round spermatids facing the acrosome. Mol Hum Reprod. 17: 207-18. 6. Baxter, J. et al. (2004) Histone hypomethylation is an indicator of epigenetic plasticity in quiescent lymphocytes. EMBO J. 23 (22): 4462-72. 7. McDowell, T.L. et al. (1999) Localization of a putative transcriptional regulator (ATRX) at pericentromeric heterochromatin and the short arms of acrocentric chromosomes. Proc Natl Acad Sci U S A. 96: 13983-8. 8. Sabbattini, P. et al. (2007) A novel role for the Aurora B kinase in epigenetic marking of silent chromatin in differentiated postmitotic cells. EMBO J. 26 (22): 4657-69. 9. Groves, I.J. et al. (2009) Lytic infection of permissive cells with human cytomegalovirus is regulated by an intrinsic 'pre-immediate-early' repression of viral gene expression mediated by histone post-translational modification. J Gen Virol. 90: 2364-74. 10. Groves, I.J. and Sinclair, J.H. (2007) Knockdown of hDaxx in normally non-permissive undifferentiated cells does not permit human cytomegalovirus immediate-early gene expression. J Gen Virol. 88: 2935-40. 11. Abe, K. et al. (2011) Loss of heterochromatin protein 1 gamma reduces the number of primordial germ cells via impaired cell cycle progression in mice. Biol Reprod. 85 (5): 1013-24.
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 date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10304 available at: 10304: https://www.bio-rad-antibodies.com/uploads/MSDS/10304.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

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Printed on 01 Aug 2018