

Datasheet: MCA1391

BATCH NUMBER 172117

Description:	MOUSE ANTI HEPATITIS B X ANTIGEN
Specificity:	HEPATITIS B X ANTIGEN
Other names:	HBxAg
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	3F6-G10
Isotype:	IgG2b
Quantity:	0.25 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	▪			1/100
Immunohistology - Paraffin	▪			1/100
ELISA	▪			
Immunoprecipitation			▪	

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	Viral
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	0.09% sodium azide (NaN ₃)
Stabilisers	1% bovine serum albumin

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	HB-Xag-Protein A Fusion protein.
External Database Links	UniProt: P03165 Related reagents
RRID	AB_322083
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the Sp-2/0-Ag14 mouse myeloma cell line.
Specificity	<p>Mouse anti Hepatitis B-X antibody, clone 3F6-G10 recognizes the HB-X antigen of hepatitis virus. The Hepatitis B X antigen is a 154 amino acid ~17 kDa multifunctional protein involved in the development of liver cirrhosis and hepatocellular carcinoma (UniProt: P03165).</p> <p>Mouse anti Hepatitis B-X antibody, clone 3F6-G10 was produced by immunization of mice with a "HB-X- Protein A" fusion construct and subsequent screening of hybridoma products against a "HB-X-GST" fusion construct (Marczinovits et al. 1997).</p> <p>Mouse anti Hepatitis B-X antibody, clone 3F6-G10 has been used successfully for the detection of the hepatitis B X antigen by immunohistochemistry in formalin fixed, paraffin embedded material, also by western blotting against the immunizing and screening fusion proteins (Pál et al. 2001). Subsequently clone 3F6-G10 has been used as a capture reagent in a sensitive sandwich ELISA and bead based flow assay for the quantitative assessment of HbX antigen in human sera (Pál et al. 2005).</p> <p>Fine epitope mapping by phage library screening indicates that the epitope recognized by Mouse anti Hepatitis B-X antibody, clone 3F6-G10 lies between amino acids 88 and 93 of the X antigen, a result subsequently confirmed by peptide ELISA (Pál et al. 2003).</p>
Histology Positive Control Tissue	Liver carcinoma/Hepatitis B infected liver.
References	<ol style="list-style-type: none"> Chun, E. <i>et al.</i> (2003) Tumor eradication by hepatitis B virus X antigen-specific CD8+ T cells in xenografted nude mice. J Immunol. 170: 1183-90. Pál, J. <i>et al.</i> (2003) Determination of the fine epitope specificity of an anti-hepatitis B virus X protein monoclonal antibody using microanalytical and molecular biological methods. Mol Immunol. 40: 241-6. Pál, J. <i>et al.</i> (2005) Sandwich type ELISA and a fluorescent cytometric microbead assay for quantitative determination of hepatitis B virus X antigen level in human sera. J Immunol Methods. 306: 183-92. Pál, J. <i>et al.</i> (2006) Comprehensive regression analysis of hepatitis B virus X antigen level and anti-HBx antibody titer in the sera of patients with HBV infection. Pathol Oncol Res. 12: 34-40.

5. Lei, J.H. *et al* (2007) Effects of HBV X gene and arsenic trioxide on the expression of p53 in cultured HepG2 cells. [Chin Med J 120: 2181-4.](#)
6. Cheng, P. *et al.* (2009) Hepatitis B virus X protein (HBx) induces G2/M arrest and apoptosis through sustained activation of cyclin B1-CDK1 kinase [Oncol Rep. 22: 1101-7.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1391>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)

Goat Anti Mouse IgG (STAR70...) [FITC](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Goat Anti Mouse IgG (STAR76...) [RPE](#)

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#), [DyLight®650](#), [DyLight®680](#), [DyLight®800](#), [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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