

Datasheet: MCA1846T

BATCH NUMBER 149350

Description:	HAMSTER ANTI MOUSE CD81
Specificity:	CD81
Other names:	TAPA-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	Eat2
Isotype:	IgG1
Quantity:	25 µg

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	▪			1/50 - 1/100
Immunohistology - Frozen (1)	▪			
Immunohistology - Paraffin		▪		
ELISA	▪			
Immunoprecipitation	▪			
Western Blotting (2)	▪			

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.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

(2)Clone Eat2 recognizes mouse CD81 under non-reducing conditions.

Target Species	Mouse
Species Cross Reactivity	<p>Reacts with: Rat</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for</p>

further information.

Product Form	Purified IgG - liquid
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Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
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Buffer Solution	Phosphate buffered saline
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Preservative Stabilisers	0.09% Sodium Azide
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Carrier Free	Yes
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Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
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Immunogen	38C13, murine B cell line.
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External Database Links	UniProt: P35762 Related reagents Entrez Gene: 12520 Cd81 Related reagents
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Synonyms	Tapa1
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RRID	AB_1102388
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Fusion Partners	Spleen cells from immunised Armenian hamsters were fused with cells of the mouse PX3-Ag.8.653 myeloma cell line.
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Specificity	<p>Hamster anti Mouse CD81 antibody, clone Eat2 recognizes mouse and rat CD81, also known as TAPA-1 or Target of the antiproliferative antibody 1. CD81 is a 236 amino acid ~26 kDa multipass transmembrane protein belonging to the TM4SF family (UniProt: P35762). In rodents CD81 is expressed at much higher levels on resting B cells than on T cells, although increased expression on T cells is found following activation. Hamster anti Mouse CD81 antibody, clone Eat2 induces homotypic aggregation of B cells and inhibits anti Ig and IL-4 induced proliferation (Maecker et al. 2000). Eat 2 requires the presence of both extracellular loops of TAPA-1 for binding.</p> <p>Mice lacking CD81 demonstrate reduced fertility through impaired oocyte-sperm fusion, double knockout CD81^{-/-} CD9^{-/-} mice are completely infertile suggesting complimentary roles in oocyte-sperm fusion (Rubenstein et al. 2006).</p>
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Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
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References	1. Clark, K.L. <i>et al.</i> (2001) PGRL is a major CD81-associated protein on lymphocytes and
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- distinguishes a new family of cell surface proteins. [J Immunol. 167 \(9\): 5115-21.](#)
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 5. Takeda, Y. *et al.* (2008) Double deficiency of tetraspanins CD9 and CD81 alters cell motility and protease production of macrophages and causes chronic obstructive pulmonary disease-like phenotype in mice. [J Biol Chem. 283: 26089-97.](#)
 6. Suzuki, M. *et al.* (2009) Tetraspanin CD9 negatively regulates lipopolysaccharide-induced macrophage activation and lung inflammation. [J Immunol. 182: 6485-93.](#)
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 8. Pan, Q. *et al.* (2011) Hepatic cell-to-cell transmission of small silencing RNA can extend the therapeutic reach of RNA interference (RNAi). [Gut. 61: 1330-9.](#)
 9. Jin, Y. *et al.* (2013) Statins decrease lung inflammation in mice by upregulating tetraspanin CD9 in macrophages. [PLoS One. 8: e73706.](#)
 10. Royo, F. *et al.* (2013) Transcriptome of extracellular vesicles released by hepatocytes. [PLoS One. 8: e68693.](#)
 11. Owens, D.M. and Watt, F.M. (2001) Influence of beta1 integrins on epidermal squamous cell carcinoma formation in a transgenic mouse model: alpha3beta1, but not alpha2beta1, suppresses malignant conversion. [Cancer Res. 61: 5248-54.](#)
 12. Jin, Y. *et al.* (2018) Double deletion of tetraspanins CD9 and CD81 in mice leads to a syndrome resembling accelerated aging. [Sci Rep. 8 \(1\): 5145.](#)
 13. Sosa, L.J. *et al.* (2013) Amyloid precursor protein is an autonomous growth cone adhesion molecule engaged in contact guidance. [PLoS One. 8 \(5\): e64521.](#)

Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>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.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1846T 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Hamster IgG (STAR104...) [DyLight®550](#), [DyLight®650](#), [DyLight®800](#),
[FITC](#)

Goat Anti Hamster IgG (STAR79...) [Biotin](#), [FITC](#), [HRP](#)

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

'M365781:200529'

Printed on 25 Mar 2023

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