

Datasheet: MCA5800F

Description:	MOUSE ANTI RAT CD1d:FITC
Specificity:	CD1d
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	WTH2
Isotype:	IgG2a
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	▪			1/1,000
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays			▪	

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	Rat								
Species Cross Reactivity	Reacts with: Mouse N.B. Antibody reactivity and working conditions may vary between species.								
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid								
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525		
Fluorophore	Excitation Max (nm)	Emission Max (nm)							
FITC	490	525							
Buffer Solution	Phosphate buffered saline								
Preservative Stabilisers	0.02% Sodium Azide (NaN ₃)								
Approx. Protein Concentrations	IgG concentration 0.5mg/ml								
Immunogen	Rat CD1d-transduced M12.4.1.C3 cells.								

External Database Links	<p>UniProt:</p> <p>P11609 Related reagents</p> <p>Q63493 Related reagents</p> <p>Entrez Gene:</p> <p>12479 Cd1d1 Related reagents</p> <p>25109 Cd1d1 Related reagents</p>
Synonyms	Cd1.1, Cd1d1
Specificity	<p>Mouse anti Rat CD1d antibody, clone WTH2 recognizes rat CD1d, a glycoprotein expressed on cortical thymocytes, certain T-cell leukaemias and various other antigen presenting cells. CD1d binds self and non-self glycolipids and presents them to T-cell receptors on natural killer cells. When activated, natural killer cells produce Th1 and Th2 cytokines.</p> <p>Clone WTH2 recognizes a different, non-overlapping epitope than clone WTH1 and binds with high affinity to the mature CD1d heavy chain independently of beta-2-microglobulin. Mouse anti Rat CD1d antibody, clone WTH2 efficiently blocks rat and mouse invariant natural killer T cell (iNKT cell) response to a-GalCer (an antigen for iNKT cells), consistently blocks activation of mouse type II NKT cell hybridomas and has a slightly lower affinity to native CD1d than clone WTH1.</p> <p>In western blotting clone WTH2 reacts weakly with rat tissue and does not cross react with mouse tissue. It reacts strongly with both rat and mouse antigens in flow cytometry and cross reacts weakly with mouse tissue in IHC and immunoprecipitation.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
References	1. Monzon-Casanova, E. <i>et al.</i> (2010) CD1d expression in paneth cells and rat exocrine pancreas revealed by novel monoclonal antibodies which differentially affect NKT cell activation. PLoS One 5:e13089
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Shelf Life	18 months from 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 Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:FITC \(MCA1210F\)](#)

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