

Datasheet: MCA2653T

Description:	n: RAT ANTI HUMAN CD137	
Specificity:	CD137	
Other names:	4-1BB LIGAND RECEPTOR	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone:	JG1.6A	
Isotype:	lgG2a	
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			
Immunohistology - Frozen				
Immunohistology - Paraffin				
ELISA	•			
Immunoprecipitation				
Western Blotting			•	

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 affinity chromatography on Protein C supernatant	6 from tissue culture
Buffer Solution	TRIS buffered saline	
Preservative Stabilisers	<0.1% Sodium Azide (NaN <sub>3</sub> )	

Approx. Protein Concentrations	IgG concentration 1.0mg/ml		
Immunogen	Recombinant human CD137-Fc.		
External Database Links	UniProt: Q07011 Related reagents  Entrez Gene: 3604 TNFRSF9 Related reagents		
Synonyms	CD137, ILA		
RRID	AB_1100691		
Fusion Partners	Lymph node cells from immunised Lou rat were fused with cells of the mouse NS-1 myeloma cell line.		
Specificity	Rat anti Human CD137 antibody, clone JG1.6A recognizes human CD137, an 83kD type I integral membrane protein, otherwise known as 4-1BB. The CD137 molecule is primarily expressed on activated T-cells. It is a costimulatory member of the tumour necrosis receptor family and regulates T-cell activation and proliferation.  Rat anti Human CD137 antibody, clone JG1.6A induces γ-interferon activity in isolated T-cells as measured by ELISA (Rajendran et al. 2019).		
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.		
Further Reading	<ol> <li>Pollok, K.E. <i>et al.</i> (1993) Inducible T cell antigen 4-1BB. Analysis of expression and function. <u>J Immunol. 150 (3): 771-81.</u></li> <li>Alderson, M.R. <i>et al.</i> (1994) Molecular and biological characterization of human 4-1BB and its ligand. <u>Eur J Immunol. 24 (9): 2219-27.</u></li> <li>Schwarz, H. <i>et al.</i> (1997) CD137, a member of the tumor necrosis factor receptor family, is located on chromosome 1p36, in a cluster of related genes, and colocalizes with several malignancies. <u>Biochem Biophys Res Commun. 235 (3): 699-703.</u></li> <li>Cannons, J.L. <i>et al.</i> (2001) 4-1BB ligand induces cell division, sustains survival, and enhances effector function of CD4 and CD8 T cells with similar efficacy. <u>J Immunol. 167 (3): 1313-24.</u></li> </ol>		
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 #10057 available at:

https://www.bio-rad-antibodies.com/SDS/MCA2653T

10057

Regulatory

For research purposes only

# Related Products

# **Recommended Secondary Antibodies**

Goat Anti Rat IgG (STAR69...)

Goat Anti Rat IgG (STAR73...)

Rabbit Anti Rat IgG (STAR17...)

FITC

Goat Anti Rat IgG (STAR131...) Alk. Phos., Biotin

Goat Anti Rat IgG (STAR72...) HRP

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) <u>DyLight®550</u>, <u>DyLight®650</u>, <u>DyLight®800</u>

Rabbit Anti Rat IgG (STAR21...) <u>HRP</u>

Rabbit Anti Rat IgG (STAR16...) <u>DyLight®800</u>

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M410622:221028'

### Printed on 25 Mar 2023

© 2023 Bio-Rad Laboratories Inc | Legal | Imprint