

Datasheet: MCA5971GA

Description:	MOUSE ANTI HUMAN CD254		
Specificity:	CD254		
Other names:	RANKL		
Format:	Purified		
<b>Product Type:</b>	Monoclonal Antibody		
Clone:	C01-2D2		
Isotype:	lgG2b		
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 <a href="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	<b>Not Determined</b>	<b>Suggested Dilution</b>
ELISA				

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 G	from ascites
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	<0.1% Sodium Azide (NaN <sub>3</sub> )	
Approx. Protein Concentrations	lgG concentration 1.0 mg/ml	
Immunogen	E. coli derived recombinant protein corresponding to aa 143-3	17 of human CD254
External Database Links	UniProt:	

	O14788 Related reagents
	Entrez Gene:  8600 TNFSF11 Related reagents
Synonyms	OPGL, RANKL, TRANCE
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells of the mouse SP2/0 myeloma cell line
Specificity	Mouse anti Human CD254, clone C01-2D2 recognizes CD254 also known as RANKL and TNFSF11. CD254 is a ~20 kDa glycoprotein, a member of the tumour necrosis factor (TNF) superfamily. CD254 is a ligand for the receptor activator of NFκB (RANK) and this interaction plays a role in osteoclastogenesis and bone resorption (Roodman 1999).
	CD254 is highly expressed by T lymphocytes and osteoblastic cells and it has been shown that the CD254/RANK interaction also plays a vital role in several immune related processes. These include lymph node and lymphocyte development (Kong et al. 1999), dendritic cell survival (Wong et al. 1997) and T-cell activation (Anderson et al. 1997). CD254 is also involved in apoptosis, through activation of the anti-apoptotic kinase AKT/PKB and the mTOR/S6K signalling pathway.
Further Reading	<ol> <li>Roodman, G.D. (1996) Advances in bone biology: the osteoclast. Endocr Rev. 17 (4): 308-32.</li> <li>Kong, Y.Y. et al. (1999) OPGL is a key regulator of osteoclastogenesis, lymphocyte development and lymph-node organogenesis. Nature. 397 (6717): 315-23.</li> <li>Anderson, D.M. et al. (1997) A homologue of the TNF receptor and its ligand enhance T-cell growth and dendritic-cell function. Nature. 390 (6656): 175-9.</li> <li>Wong, B.R. et al. (1997) TRANCE (tumor necrosis factor [TNF]-related activation-induced cytokine), a new TNF family member predominantly expressed in T cells, is a dendritic cell-specific survival factor. J Exp Med. 186 (12): 2075-80.</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	Material Safety Datasheet documentation #10040 available at:

# **Related Products**

10040

For research purposes only

Information

Regulatory

https://www.bio-rad-antibodies.com/SDS/MCA5971GA

## **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (STAR76...)

Rabbit Anti Mouse IgG (STAR13...)

HRP

Goat Anti Mouse IgG (STAR70...)

FITC

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 (STAR9...) FITC

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

Goat Anti Mouse IgG (STAR77...) HRP

**Recommended Negative Controls** 

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

 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 'M389640:210806'

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