

Datasheet: MCA5971GA

Description:	MOUSE ANTI HUMAN CD254
Specificity:	CD254
Other names:	RANKL
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	C01-2D2
Isotype:	IgG2b
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
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	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	<i>E. coli</i> derived recombinant protein corresponding to aa 143-317 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 immunised 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 NFkB (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	1. Roodman, G.D. (1996) Advances in bone biology: the osteoclast. Endocr Rev. 17 (4): 308-32. 2. Kong, Y.Y. <i>et al.</i> (1999) OPGL is a key regulator of osteoclastogenesis, lymphocyte development and lymph-node organogenesis. Nature. 397 (6717): 315-23. 3. Anderson, D.M. <i>et al.</i> (1997) A homologue of the TNF receptor and its ligand enhance T-cell growth and dendritic-cell function. Nature. 390 (6656): 175-9. 4. Wong, B.R. <i>et al.</i> (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.
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation available at: Material Safety Datasheet documentation #10040 available at https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Human Anti Mouse IgG2b (HCA038...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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