

Datasheet: MCA4711 BATCH NUMBER 151937

Description:	RAT ANTI MOUSE CD254	
Specificity:	CD254	
Other names:	sRANKL	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone:	IK22/5	
Isotype:	lgG2a	
Quantity:	0.25 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	•			1/10 - 1/20
Immunohistology - Frozen	•			
Immunohistology - Paraffin				
ELISA				
Immunoprecipitation	•			
Western Blotting	•			
Immunofluorescence	•			

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	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)

Approx. Protein Concentrations

IgG concentration 0.5mg/ml

External Database Links

UniProt:

O35235 Related reagents

Entrez Gene:

21943 Tnfsf11 Related reagents

Synonyms

Opgl, Rankl, Trance

RRID

AB 2206081

Specificity

Rat anti Mouse CD254 antibody, clone IK22/5 recognises CD254, otherwise known as Receptor activator of nuclear factor kappa B ligand (RANKL) or TNF-related activation-induced cytokine (TRANCE), a member of the tumour necrosis factor ligand superfamily. CD254 is a cytokine that binds osteoprotegerin or RANK and plays an important role in bone metabolism, where it acts as an osteoclast differentiation and activation factor. Overproduction of CD254 is implicated in a range of degenerative bone diseases.

CD254 is also expressed by T helper cells and augments the ability of dendritic cells to stimulate naïve T cell proliferation. It may play a role in regulating interactions between T cells and dendritic cells and in the regulation of T cell-dependent immune responses.

Rat anti Mouse CD254 antibody, clone IK22/5 blocks ligand binding.

Flow Cytometry

Use 10ul of the suggested working dilution to label $1x10^6$ cells in 100ul.

References

- 1. Kamijo, S. *et al.* (2006) Amelioration of bone loss in collagen-induced arthritis by neutralizing anti-RANKL monoclonal antibody. <u>Biochem Biophys Res Commun. 347:</u> 124-32.
- 2. Miyahira, Y. *et al.* (2003) Cutting edge: a potent adjuvant effect of ligand to receptor activator of NF-kappa B gene for inducing antigen-specific CD8+ T cell response by DNA and viral vector vaccination. J Immunol. 171: 6344-8.
- 3. Miyahira, Y. *et al.* (2005) Immune responses against a single CD8+-T-cell epitope induced by virus vector vaccination can successfully control *Trypanosoma cruzi* infection. Infect Immun. 73: 7356-65.
- 4. Knoop, K. *et al.* (2009) RANKL is necessary and sufficient to initiate development of antigen-sampling M cells in the intestinal epithelium. <u>J Immunol</u>. 183:5738-47.
- 5. Nair, V.R. *et al.* (2016) Microfold Cells Actively Translocate Mycobacterium tuberculosis

to Initiate Infection. Cell Rep. 16 (5): 1253-1258.

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.

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/MCA4711 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Rabbit Anti Rat IgG (STAR17...)

Goat Anti Rat IgG (STAR72...)

HRP

Goat Anti Rat IgG (STAR69...)

Goat Anti Rat IgG (STAR73...)

RPE

Rabbit Anti Rat IgG (STAR21...)

HRP

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

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

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL (MCA1212)

 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 'M367952:200529'

Printed on 18 Jan 2024

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