

Datasheet: MCA4711

Description:	RAT ANTI MOUSE CD254
Specificity:	CD254
Other names:	sRANKL
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	IK22/5
Isotype:	IgG2a
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	<0.1% Sodium Azide (NaN ₃)
Approx. Protein	IgG concentration 0.5mg/ml

Concentrations

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 1×10^6 cells in 100ul.

References

1. Kamijo, S. *et al.* (2006) Amelioration of bone loss in collagen-induced arthritis by neutralizing anti-RANKL monoclonal antibody. [Biochem Biophys Res Commun. 347: 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. [J Immunol. 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

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
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA4711 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@650 , DyLight@800
Goat Anti Rat IgG (STAR72...)	HRP
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

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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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
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