

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

RRID AB_2206081

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 (NaN₃)

Approx. Protein Concentrations IgG concentration 0.5mg/ml

External Database UniProt:

Links

[O35235](#) [Related reagents](#)

Entrez Gene:

[21943](#) Tnfsf11 [Related reagents](#)

Synonyms

Opgl, Rankl, Trance

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

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

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

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

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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