

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: | 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 | 0.09% Sodium Azide (NaN ₃) |

| | |
|---------------------------------------|--|
| Approx. Protein Concentrations | IgG concentration 0.5mg/ml |
| External Database Links | <p>UniProt: O35235 Related reagents</p> <p>Entrez Gene: 21943 Tnfsf11 Related reagents</p> |
| Synonyms | Opgl, Rankl, Trance |
| RRID | AB_2206081 |
| Specificity | <p>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.</p> <p>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.</p> <p>Rat anti Mouse CD254 antibody, clone IK22/5 blocks ligand binding.</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul. |
| References | <ol style="list-style-type: none"> 1. Kamijo, S. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (2005) Immune responses against a single CD8+-T-cell epitope induced by virus vector vaccination can successfully control <i>Trypanosoma cruzi</i> infection. Infect Immun. 73: 7356-65. 4. Knoop, K. <i>et al.</i> (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. <i>et al.</i> (2016) Microfold Cells Actively Translocate Mycobacterium tuberculosis to Initiate Infection. Cell Rep. 16 (5): 1253-1258. |
| Storage | <p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>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</p> |

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

| | |
|--|---|
| Goat Anti Rat IgG (STAR69...) | FITC |
| Goat Anti Rat IgG (STAR73...) | RPE |
| Rabbit Anti Rat IgG (STAR17...) | FITC |
| Goat Anti Rat IgG (STAR72...) | HRP |
| Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) | DyLight@550 , DyLight@650 , DyLight@800 |
| Rabbit Anti Rat IgG (STAR21...) | HRP |
| Rabbit Anti Rat IgG (STAR16...) | DyLight@800 |
| 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 |
|----------------------------------|---|------------------|---|---------------|---|

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)
'M367952:200529'

Printed on 25 Mar 2023