

Datasheet: MCA730F

| | |
|----------------------|---------------------------|
| Description: | MOUSE ANTI RAT CD134:FITC |
| Specificity: | CD134 |
| Other names: | OX40 |
| Format: | FITC |
| Product Type: | Monoclonal Antibody |
| Clone: | OX-40 |
| 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 |
|----------------------------|-----|----|----------------|--------------------|
| Flow Cytometry | ▪ | | | Neat |
| Immunohistology - Frozen | | | ▪ | |
| Immunohistology - Paraffin | | | ▪ | |

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

| | | | |
|---------------------------------------|---|----------------------------|--------------------------|
| Target Species | Rat | | |
| Product Form | Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | FITC | 490 | 525 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative | 0.09% Sodium Azide | | |
| Stabilisers | 1% Bovine Serum Albumin | | |
| Approx. Protein Concentrations | IgG concentration 0.1 mg/ml | | |
| Immunogen | Phytohemagglutinin (PHA) activated Rat Lymph Node Cells. | | |
| External Database Links | UniProt: | | |

Entrez Gene:

[25572](#) Tnfrsf4 [Related reagents](#)

Synonyms Ox40, Txgp11

RRID AB_321580

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells from the NS0/1 Ag4.1 mouse myeloma cell line.

Specificity **Mouse anti Rat CD134 antibody, clone OX-40** recognizes the OX40 antigen which is present on activated T lymphocytes that also express CD4 ([Paterson *et al.* 1987](#)).

The antigen is a glycoprotein of approximately 50 kDa which is related in sequence to the low affinity Nerve Growth Factor Receptor ([Mallett *et al.* 1990](#)).

Mouse anti Rat CD134 antibody, clone OX-40 is not mitogenic, but does enhance some T cell responses ([Paterson *et al.* 1987](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Paterson, D.J. *et al.* (1987) Antigens of activated rat T lymphocytes including a molecule of 50,000 Mr detected only on CD4 positive T blasts. [Mol Immunol. 24 \(12\): 1281-90.](#)
2. Mallett, S. *et al.* (1990) Characterization of the MRC OX40 antigen of activated CD4 positive T lymphocytes--a molecule related to nerve growth factor receptor. [EMBO J. 9 \(4\): 1063-8.](#)
3. Richardson, P.R. *et al.* (1996) Immunocytochemical study of retinal diode laser photocoagulation in the rat. [Br J Ophthalmol. 80 \(12\): 1092-8.](#)
4. Cousins, L. *et al.* (2006) Eosinophilic bowel disease controlled by the BB rat-derived lymphopenia/Gimap5 gene. [Gastroenterology. 131 \(5\): 1475-85.](#)
5. Snelgrove RJ *et al.* (2012) OX40 ligand fusion protein delivered simultaneously with the BCG vaccine provides superior protection against murine *Mycobacterium tuberculosis* infection. [J Infect Dis. 205 \(6\): 975-83.](#)
6. Stephens, L.A. *et al.* (2004) Phenotypic characterization of regulatory CD4+CD25+ T cells in rats. [Int Immunol. 16: 365-75.](#)
7. Volovitz, I. *et al.* (2010) T cell vaccination induces the elimination of EAE effector T cells: analysis using GFP-transduced, encephalitogenic T cells. [J Autoimmun. 35 \(2\): 135-44.](#)
8. Stephens, L.A. *et al.* (2004) Phenotypic characterization of regulatory CD4+CD25+ T cells in rats. [Int Immunol. 16: 365-75.](#)
9. Giorgini, A. and Noble, A. (2007) Blockade of chronic graft-versus-host disease by alloantigen-induced CD4+CD25+Foxp3+ regulatory T cells in nonlymphopenic hosts. [J Leukoc Biol. 82: 1053-61.](#)
10. Albillos, A. *et al.* (2010) The biological response modifier AM3 attenuates the inflammatory cell response and hepatic fibrosis in rats with biliary cirrhosis. [Gut. 59: 943-52.](#)
11. Humphreys, I.R. *et al.* (2003) A critical role for OX40 in T cell-mediated immunopathology during lung viral infection. [J Exp Med. 198: 1237-42.](#)
12. Walker, L.S. *et al.* (1999) Compromised OX40 function in CD28-deficient mice is linked with failure to develop CXC chemokine receptor 5-positive CD4 cells and germinal centers. [J Exp Med. 190: 1115-22.](#)
13. Thauvat, O. *et al.* (2010) Immune responses elicited in tertiary lymphoid tissues display distinctive features. [PLoS One. 5: e11398.](#)

14. Lühder, F. *et al.* (2017) Laquinimod enhances central nervous system barrier functions. [Neurobiol Dis. Feb 21. pii: S0969-9961\(17\)30031-1. \[Epub ahead of print\]](#)
15. Cheng, H.Y. *et al.* (2018) Bioimaging of alloantigen-stimulated regulatory T cells in rat vascularized composite allotransplantation. [PLoS One. 13 \(9\): e0203624.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

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 #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:FITC \(MCA691F\)](#)

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