Anti-CD4 Antibody

IRS051



| Product Type: | Recombinant Rabbit monoclonal IgG, primary antibodies |
|--------------------------------|---|
| Species reactivity: | Mouse |
| Applications: | mIHC |
| Molecular Wt: | Predicted band size: 51 kDa |
| Description: | In molecular biology, CD4 (cluster of differentiation 4) is a glycoprotein that serves as a co- receptor for the T-cell receptor (TCR). CD4 is found on the surface of immune cells such as helper T cells, monocytes, macrophages, and dendritic cells. It was discovered in the late 1970s and was originally known as leu-3 and T4 (after the OKT4 monoclonal antibody that reacted with it) before being named CD4 in 1984. In humans, the CD4 protein is encoded by the CD4 gene. CD4+ T helper cells are white blood cells that are an essential part of the human immune system. They are often referred to as CD4 cells, T helper cells or T4 cells. They are called helper cells because one of their main roles is to send signals to other types of immune cells, including CD8 killer cells, which then destroy the infectious particle. If CD4 cells become depleted, for example in untreated HIV infection, or following immune suppression prior to a transplant, the body is left vulnerable to a wide range of infections that it would otherwise have been able to fight. |
| lmmunogen: | Recombinant protein within mouse CD4 aa 27-394. |
| Positive control: | Mouse spleen tissue. |
| Subcellular location: | Cell membrane. |
| Database links: | SwissProt: P06332 Mouse |
| Recommended Dilutions: mIHC | 1:100 |
| Storage Buffer: | PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide. |
| Storage Instruction: | Store at +4 $^\circ\!C$ after thawing. Aliquot store at -20 $^\circ\!C$ or -80 $^\circ\!C$. Avoid repeated freeze / thaw cycles. |
| Purity: | Protein A affinity purified. |

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Orders:0086-571-88062880

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

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Images



Fig1: mIHC analysis of mouse spleen tissue (Formalin/PFA-fixed paraffin-embedded sections) with Rabbit anti-CD4 antibody (IRS051) at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95°C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.



Fig2: mIHC analysis of mouse lung tissue (Formalin/PFA-fixed paraffin-embedded sections) with TTF1 (IRS063), RAGE (IRS073), CD20, CD4 (IRS051) and aSMA (IRS048) antibody at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95° C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.



Fig3: mIHC analysis of mouse osteosarcoma subcutaneous tumor tissue (Formalin/PFA-fixed paraffin-embedded sections) with CD8, F4/80 (IRS052), CD4 (IRS051), CD206 (IRS049) and CD11c antibody at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95°C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.



Fig4: mIHC analysis of mouse spleen tissue (Formalin/PFA-fixed paraffin-embedded sections) with IL-17A (IRS056), CD4 (IRS051) and CD8 antibody at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95 $^{\circ}$ C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. Ruterbusch M et al. In Vivo CD4(+) T Cell Differentiation and Function: Revisiting the Th1/Th2 Paradigm. Annu Rev Immunol. 2020 Apr
- 2. Oh DY et al. Cytotoxic CD4(+) T cells in cancer: Expanding the immune effector toolbox. Immunity. 2021 Dec

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