abcam

ab52602

# Anti-CCR7/CD197 antibody [4B12]

## Key facts

| | |
|---|---|
| **Isotype** | IgG2a |
| **Host species** | Rat |
| **Storage buffer** | Preservative: 0.02% Sodium azide Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Clone number** | 4B12 |
| **Purification technique** | Affinity purification Protein G |
| **Light chain type** | kappa |
| **Concentration** | 1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 5-10 µg/mL |
| **Notes** | ab18541 - Rat IgG2b monoclonal, is suitable for use as an isotype control with this antibody. |

## Target data

See full target information CCR7/CD197

| | |
|---|---|
| **Function** | Receptor for the MIP-3-beta chemokine. |

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage duration** | 1-2 weeks |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle |

## Notes

**Want a custom formulation?**
This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

| | |
|---|---|
| **Activity summary** | CCR7 also known as CD197 is a chemokine receptor with a molecular mass of approximately 43-48 kDa. The receptor is known to be expressed predominantly in lymphoid tissues such as the spleen and lymph nodes. Additionally CCR7 is found on various immune cells like T cells and dendritic cells. Researchers study CCR7 using different methods such as CCR7-PE and CCR7-APC antibody staining in flow cytometry to examine its expression on immune cells in various conditions. |

| | |
|---|---|
| **Biological function summary** | CCR7 plays an important role in directing the migration and homeostasis of T cells and dendritic cells. It is not part of a larger protein complex but interacts functionally with specific signaling enzymes upon activation. CCR7 is important for the function of the immune system aiding in the development of adaptive immunity by controlling lymphocyte movement and positioning in lymphoid tissues. This receptor assists in guiding cells to specific lymphoid organs where immune responses are initiated and maintained. |
| **Pathways** | CCR7 is significantly involved in the CCL19/CCL21 chemokine signaling pathways which help direct immune cell positioning. CCR7 interacts with these chemokines to regulate the trafficking of cells to lymphoid tissues. Additionally it works in tandem with other receptors like CCR5 in the regulation of immune cell mobilization. These pathways are essential in coordinating the immune response during infection and inflammation. |
| **Associated diseases and disorders** | CCR7 is connected with cancer metastasis and chronic inflammatory diseases. Its role in cell migration makes it relevant in the metastasis of certain cancers where cells misregulate their movement and spread from the original tumor site. Additionally CCR7's involvement in chronic inflammatory diseases highlights its connection to rheumatoid arthritis where it may interact with other proteins such as CCL19 and CCL21 contributing to disease progression. Understanding these interactions helps develop potential therapeutic strategies targeting CCR7 in such diseases. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

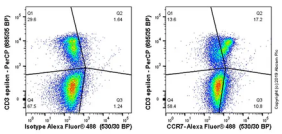
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

## 1 product image



### Flow Cytometry - Anti-CCR7/CD197 antibody [4B12] (ab52602)

CCR7/CD197 Flow Cytometry staining using rat Anti-CCR7/CD197 antibody

C57BL6 mouse splenocytes were incubated with Rat IgG2b, kappa monoclonal [RTK4530] (ab18541) (left) or anti-CCR7 [4B12] antibody (ab52602) (right) at 10ug/ml for 30 min at 4+°C. The secondary antibody Goat Anti-Rat IgG H&L (Alexa Fluor® 488) (ab150157) was used at 1/2000 dilution for 30 min at 4+°C. The cells were simultaneously stained with anti-CD3ε PerCP (10ug/ml) (ab190299).
Acquisition of >30,000 total events were collected. Gating strategy - live lymphocytes

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.