abcam

# ab225638

# Anti-IL-4 antibody [EPR22879-236]

Recombinant | RabMAb | 20ul selling size

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Clone number** | EPR22879-236 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 0.511 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

### IP

**Not recommended**

| | |
|---|---|
| **Species** | Mouse, Rat, Human |
| **Dilution info** | - |
| **Notes** | - |

### WB

### Not recommended

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | - |
| **Notes** | Only validated in WB with recombinant protein |

| | |
|---|---|
| **Species** | Rat |
| **Dilution info** | - |
| **Notes** | Only validated in WB with recombinant protein |

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | Only validated in WB with recombinant protein |

## IHC-P

### Not recommended

| | |
|---|---|
| **Species** | Mouse, Rat, Human |
| **Dilution info** | - |
| **Notes** | - |

## ICC/IF

### Not recommended

| | |
|---|---|
| **Species** | Mouse, Rat, Human |
| **Dilution info** | - |
| **Notes** | - |

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 1/50 |

| | |
|---|---|
| **Notes** | - |

**Not recommended**

| | |
|---|---|
| **Species** | Rat, Human |
| **Dilution info** | - |
| **Notes** | - |

## Target data

See full target information Il4

| | |
|---|---|
| **Function** | Cytokine secreted primarily by mast cells, T-cells, eosinophils, and basophils that plays a role in regulating antibody production, hematopoiesis and inflammation, and the development of effector T-cell responses (PubMed:3083412). Induces the expression of class II MHC molecules on resting B-cells (PubMed:3498301). Enhances both secretion and cell surface expression of IgE and IgG1 (PubMed:3498301). Also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes (By similarity). Positively regulates IL31RA expression in macrophages. Stimulates autophagy in dendritic cells by interfering with mTORC1 signaling and through the induction of RUFY4 (PubMed:26416964). In addition, plays a critical role in higher functions of the normal brain, such as memory and learning (PubMed:25772794, PubMed:28202615). Upon binding to IL4, IL4R receptor dimerizes either with the common IL2R gamma chain/IL2RG to produce the type 1 signaling complex, located mainly on hematopoietic cells, or with the IL13RA1 to produce the type 2 complex, which is also expressed on nonhematopoietic cells. Engagement of both types of receptors initiates JAK3 and to a lower extend JAK1 phosphorylation leading to activation of the signal transducer and activator of transcription 6/STAT6 (PubMed:25847241, PubMed:8624821). |

## Storage

| | |
|---|---|
| **Shipped at conditions** | Conditional Ambient |
| **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

**Patented technology**
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

**What are the advantages of a recombinant monoclonal antibody?**
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

## 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**

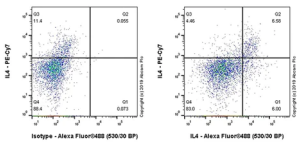
We do not recommend this combination. It is not covered by our product promise.

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 (Intracellular) - Anti-IL-4 antibody [EPR22879-236] (ab225638)

IL-4 Flow Cytometry (Intracellular) staining using rabbit Anti-IL-4 antibody

Intracellular flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized Mouse splenocytes treated with 2.5µg/ml concanavalin A for 3 days cells labelling IL-4 with ab225638 at 1/50 dilution.
A Goat anti rabbit IgG (Alexa Fluor®488, ab150097) at 1/2000 dilution was used as the secondary antibody.

Cells were surface stained with anti-CD4 conjugated to APC/Fire™ 750, then fixed with 2% PFA for 10min followed by intracellularly stained with anti-IL4 conjugated to PE/Cy7 and rabbit IgG (Left) or ab225248 (Right). Gated on CD4+T cells.

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