abcam

ab235129

# Anti-Lambda Light chain antibody [1-155-2]

Recombinant

## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **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** | 1-155-2 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1.023 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1.105 µg/mL |
| **Notes** | - |

## Target data

See full target information IGLV1-51

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|---|---|
| **Function** | V region of the variable domain of immunoglobulin light chains that participates in the antigen recognition (PubMed:24600447). Immunoglobulins, also known as antibodies, are membrane-bound or secreted glycoproteins produced by B lymphocytes. In the recognition phase of humoral immunity, the membrane-bound immunoglobulins serve as receptors which, upon binding of a specific antigen, trigger the clonal expansion and differentiation of B lymphocytes into immunoglobulins-secreting plasma cells. Secreted immunoglobulins mediate the effector phase of humoral immunity, which results in the elimination of bound antigens (PubMed:20176268, PubMed:22158414). The antigen binding site is formed by the variable domain of one heavy chain, together with that of its associated light chain. Thus, each immunoglobulin has two antigen binding sites with remarkable affinity for a particular antigen. The variable domains are assembled by a process called V-(D)-J rearrangement and can then be subjected to somatic hypermutations which, after exposure to antigen and selection, allow affinity maturation for a particular antigen (PubMed:17576170, PubMed:20176268). |

## Storage

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|---|---|
| **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

**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.

**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** | Lambda Light Chain also known as lambda chain or lambda protein forms a part of immunoglobulins (antibodies). Its mass typically ranges between 22 to 24 kDa. This protein is expressed primarily in B cells. Specifically it pairs with heavy chains to form the complete antibody molecule. It participates in the antigen recognition process supporting the immune system's defense mechanisms. |
| **Biological function summary** | Lambda Light Chain participates in immunological functions by contributing to the antigen-binding site of antibodies. It exists as a part of the immunoglobulin complex. The lambda chain alongside heavy chains forms the variable part of antibodies allowing specificity in antigen recognition. Its variation leads to a diverse antibody repertoire which is important for recognizing a wide range of pathogens. |
| **Pathways** | Lambda Light Chain fits into pathways involving adaptive immune responses. It is important in antigen processing and presentation pathways. In this context it interacts with the heavy chains which together drive the specificity and efficiency of immune response pathways. It also associates with proteins like the major histocompatibility complex (MHC) which facilitates antigen presentation to T cells. |
| **Associated diseases and disorders** | Lambda Light Chain associates with multiple myeloma a cancer of plasma cells and light chain amyloidosis a disorder where light chains accumulate as amyloid fibrils in tissues. In these conditions proteins like immunoglobulin heavy chain and albumin often interact with or are affected by lambda chains providing insights into disease mechanisms and potential targets for therapeutic intervention. |

## 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**

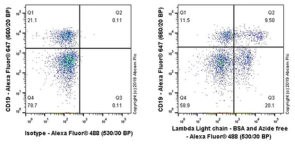
We do not recommend this combination. It is not covered by our product promise.

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-Lambda Light chain antibody [1-155-2] (ab235129)

Lambda Light chain Flow Cytometry staining using mouse Anti-Lambda Light chain antibody

Flow cytometric analysis of human peripheral blood mononuclear cell (PBMC) (right) labeling Lambda Light chain with ab235129 at 1.105µg/ml compared with mouse monoclonal IgG Isotype Control (left). Goat anti-mouse IgG (Alexa Fluor® 488) (ab150113) at 1/2000 dilution was used as the secondary antibody.
Cells were stained with mouse IgG (Left) or ab235129 (Right). Then stained with anti-CD19 conjugated to Alexa Fluor® 647.

Gated on viable cells.

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