# abcam

# Product datasheet

# Anti-Lambda Light chain antibody [EPR5367-62] - BSA and Azide free ab185131



RabMAb

### 6 Images

#### Overview

Product name Anti-Lambda Light chain antibody [EPR5367-62] - BSA and Azide free

**Description** Rabbit monoclonal [EPR5367-62] to Lambda Light chain - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IHC-P, ICC/IF, Flow Cyt (Intra), ELISA, WB

Species reactivity Reacts with: Human

Immunogen Full length native protein (purified) corresponding to Human Lambda Light chain.

**General notes** ab185131 is the carrier-free version of <u>ab124719</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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 production

For more information see here.

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

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

1

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR5367-62

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab185131 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
ICC/IF		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ELISA		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 25 kDa.

#### **Target**

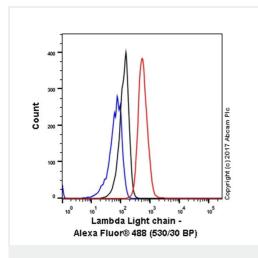
Relevance All five immunoglobulin classes share the same basic four polypeptide chain structure of two

heavy-chains and two light chains. There are five heavy chain types, and two light-chain types (Kappa and Lambda) both having a molecular weight of 22.5kDa. Any heavy-chain type can associate with either light-chain type, but on any immunoglobulin molecule both light-chains are of the same type. Kappa and Lambda consist of a variable region and a constant region and can easily be differentiated by the antigenic properties of the constant region. The ratio of Kappa to Lambda is 70:30, the vast majority of which is bound to heavy-chain in immunoglobulin. In normal individuals low levels of free light-chain are present in serum (kappa, 1.6-15.2 mg/L; Lambda, 0.4-4.2mg/L), with the occurrence of multiple myeloma or other B-cell malignancies these levels can be greatly elevated and can be found at high levels in the urine (Bence-Jones proteins).

Cellular localization Cytoplasmic

2

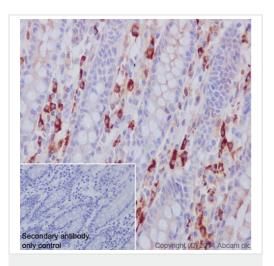
#### **Images**



Flow Cytometry (Intracellular) - Anti-Lambda Light chain antibody [EPR5367-62] - BSA and Azide free (ab185131)

Intracellular Flow Cytometry analysis of Ramos (human Burkitt's lymphoma) cells labeling Lambda Light chain with unpurified **ab124719** at 1/50 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

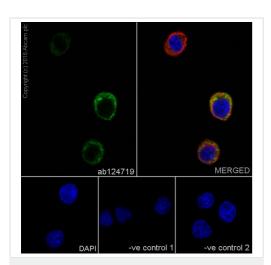
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab124719).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lambda Light chain antibody [EPR5367-62] - BSA and Azide free (ab185131)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue labelling Lambda Light chain with purified <a href="mailto:ab124719">ab124719</a> at 1/300. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. <a href="mailto:ab97051">ab97051</a>, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab124719</u>).



Immunocytochemistry/ Immunofluorescence - Anti-Lambda Light chain antibody [EPR5367-62] - BSA and Azide free (ab185131)

Immunocytochemistry/Immunofluorescence analysis of Ramos cells labelling Lambda Light chain with purified  $\underline{ab124719}$  at 1/250. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100.  $\underline{ab150077}$ , an Alexa Fluor<sup>®</sup> 488-conjugated goat antirabbit lgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.  $\underline{ab7291}$ , a mouse anti-tubulin (1/1000) and  $\underline{ab150120}$ , an Alexa Fluor<sup>®</sup> 594-conjugated goat antimouse lgG (1/500) were also used.

Control 1: primary antibody (1/250) and secondary antibody, **ab150120**, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse IgG (1/500).

Control 2:  $\underline{ab7291}$  (1/1000) and secondary antibody,  $\underline{ab150077}$ , an Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit lgG (1/500).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab124719).

Indirect ELISA antibody dose-response curve
antigen at 1000 ng/ml

\*\*Kappa Light Chains (Free)\*\*

\*\*Lambda Light Chains (Free)\*\*

\*\*Human IgA\*\*

\*\*Human IgA\*\*

\*\*Human IgG\*\*

\*\*Rat IgG\*\*

\*\*Discontinuous IgG\*\*

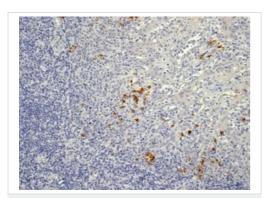
\*\*Concentration of Antibody (ng/ml)\*

\*\*Concentration of Antibody (ng/ml)\*

ELISA - Anti-Lambda Light chain antibody [EPR5367-62] - BSA and Azide free (ab185131)

ELISA analysis of Human Kappa light chain (Free), Human Lambda Light Chains (Free), Human IgA, Human IgM, Human IgG, Rat IgG, Mouse IgG at 1000 ng/mL with <a href="mailto:ab124719">ab124719</a> at 1000~0ng/mL. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab124719</u>).

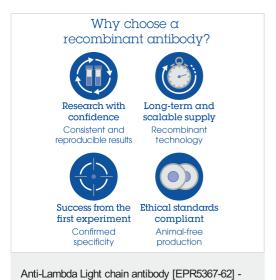


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lambda Light chain antibody [EPR5367-62] - BSA and Azide free (ab185131)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling Lambda Light chain with unpurified **ab124719** at a dilution of 1/250.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab124719).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



BSA and Azide free (ab185131)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise,

please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

# Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors