# abcam

# Product datasheet

# Anti-Lambda Light chain antibody [EPR5367-62] ab124719

Recombinant RabMAb

# 3 References 9 Images

#### Overview

**Product name** Anti-Lambda Light chain antibody [EPR5367-62]

**Description** Rabbit monoclonal [EPR5367-62] to Lambda Light chain

Host species Rabbit

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

Species reactivity Reacts with: Human

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

lgΑ.

Positive control WB: Human tonsil, plasma, thymus and spleen lysates. IHC-P: Human tonsil and colon tissues.

ICC/IF: Ramos cells.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

Improved sensitivity and specificityLong-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.

# **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

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Purity Protein A purified

Clonality Monoclonal
Clone number EPR5367-62

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab124719 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
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		1/20000. Predicted molecular weight: 25 kDa.  For unpurified use at 1/50000 - 1/200000.
ELISA		1/64000.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.  See IHC antigen retrieval protocols.
ICC/IF		1/250. For unpurified use at 1/500 - 1/1000.

#### **Target**

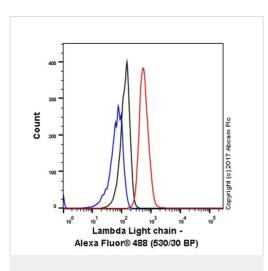
#### Relevance

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 arepresent 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**

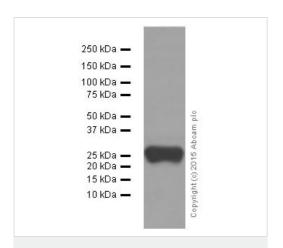
Cytoplasmic

#### **Images**



Flow Cytometry (Intracellular) - Anti-Lambda Light chain antibody [EPR5367-62] (ab124719)

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 Fluorr<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.



Western blot - Anti-Lambda Light chain antibody [EPR5367-62] (ab124719)

Anti-Lambda Light chain antibody [EPR5367-62] (ab124719) at 1/100000 dilution (purified) + Human plasma lysate at 20  $\mu$ g

#### Secondary

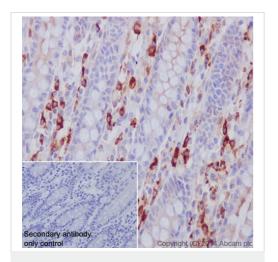
Peroxidase-conjugated goat anti-rabbit lgG, (H+L) at 1/1000 dilution

Predicted band size: 25 kDa
Observed band size: 25 kDa

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Lambda Light chain antibody [EPR5367-62] (ab124719)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lambda Light chain antibody [EPR5367-62] (ab124719)

Anti-Lambda Light chain antibody [EPR5367-62] (ab124719) at 1/20000 dilution (purified) + Human thymus tissue lysate at 20 µg

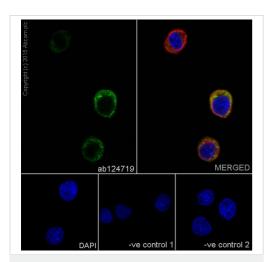
#### Secondary

Peroxidase-conjugated goat anti-rabbit lgG, (H+L) at 1/1000 dilution

**Predicted band size:** 25 kDa **Observed band size:** 25 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue labelling Lambda Light chain with purified ab124719 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.

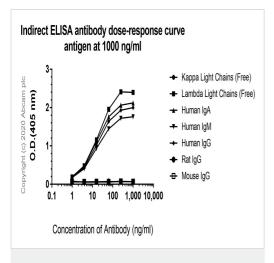


Immunocytochemistry/ Immunofluorescence - Anti-Lambda Light chain antibody [EPR5367-62] (ab124719)

Immunocytochemistry/Immunofluorescence analysis of Ramos cells labelling Lambda Light chain with purified ab124719 at 1/250. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100.  $\underline{ab150077}$ , an Alexa Fluor 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 594-conjugated goat antimouse lgG (1/500) were also used.

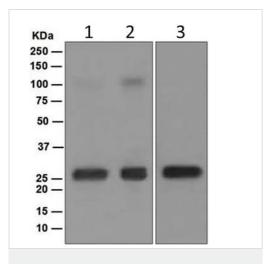
Control 1: primary antibody (1/250) and secondary antibody, **ab150120**, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse IgG (1/500).

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



ELISA - Anti-Lambda Light chain antibody [EPR5367-62] (ab124719)

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 ab124719 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.



Western blot - Anti-Lambda Light chain antibody [EPR5367-62] (ab124719)

**All lanes :** Anti-Lambda Light chain antibody [EPR5367-62] (ab124719) at 1/50000 dilution (unpurified)

Lane 1 : Human tonsil lysate

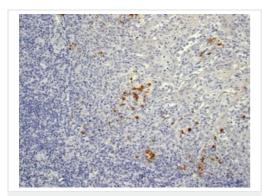
Lane 2 : Human plasma lysate
Lane 3 : Human spleen lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: HRP-conjugated goat anti-rabbit lgG at 1/2000 dilution

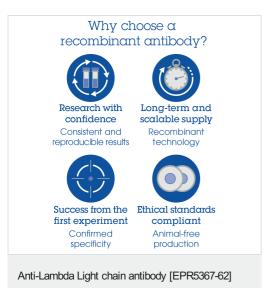
Predicted band size: 25 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lambda Light chain antibody [EPR5367-62] (ab124719)

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.

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



(ab124719)

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