abcam

Product datasheet

Anti-Kappa light chain antibody [EPR5367-8] ab124727

Recombinant RabMAb

2 References 5 Images

Overview

Product name Anti-Kappa light chain antibody [EPR5367-8]

Description Rabbit monoclonal [EPR5367-8] to Kappa light chain

Host species Rabbit

Tested applications Suitable for: WB, IP, ELISA, IHC-P

Species reactivity Reacts with: Human

Immunogen Full length native protein (purified) corresponding to Human Kappa light chain. Purified Human

Positive control IP: Human spleen lysate. WB: Human tonsil, plasma and spleen lysate; IHC: Human tonsil lysate.

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

Properties

Form Liquid

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

Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

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

Purity Protein A purified

Clonality Monoclonal Clone number EPR5367-8

Isotype lgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab124727 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
WB		1/10000 - 1/50000. Predicted molecular weight: 25 kDa.
IP		1/10 - 1/100.
ELISA		1/16000.
IHC-P		1/5000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. antigen retrieval is recommended.

Target

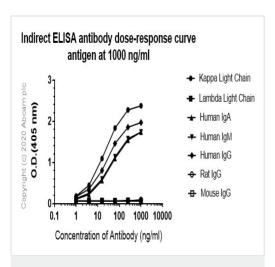
Relevance

Immunoglobulins belong to a group of related glyco proteins which make up 20% of serum proteins. Antigens and immunoglobulins react to confer immunity to individuals. Immunoglobulins have similar structures of two identical heavy chains and two identical light chains. Both the heavy chains and the light chains are divided into constant and variable regions. The constant regions have the same amino acid sequences between all the immunoglobulin classes. The variable regions have approximately 110 amino acids with high sequence variability. The amino acid sequence of the heavy chain determines the class of an immunoglobulin. The five types of immunoglobulin heavy chains are known as: IgG, IgA, IgM, IgD, and IgE. IgG is divided into four subclasses, and IgA is divided into two subclasses. In serum IgA and IgG are monomers with a single 4 polypeptide unit; while, IgM is a pen tamer. IgA may also form polymers. Kappa light chain antibody can be used for the identification of leukemias, plasmacytomas and certain non Hodgkin's lymphomas. Kappa light chain contains one immunoglobulin like domain. The EU sequence has the INV allotypic marker, Ala 45 and Val 83. The ROY sequence has the INV allotypic marker, Ala 45 and Leu 83.

Cellular localization

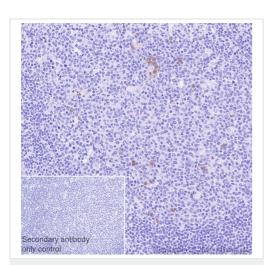
Cytoplasmic and Secreted

Images



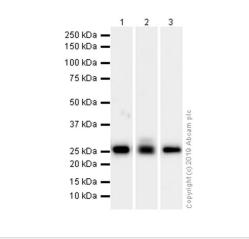
ELISA - Anti-Kappa light chain antibody [EPR5367-8] (ab124727)

ELISA analysis of Kappa Light Chains, Lambda Light Chains, Human IgA, Human IgM, Human IgG, Rat IgG, and Mouse IgG at 1000ng/mL using purified ab124727. Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) was used as the secondary antibody at 1/2500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Kappa light chain antibody [EPR5367-8] (ab124727)

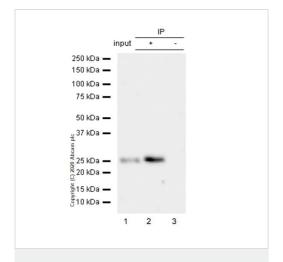
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human tonsil tissue sections labeling Kappa light chain with purified ab124727 at 1/5000 dilution (0.06 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-Kappa light chain antibody [EPR5367-8] (ab124727)



Predicted band size: 25 kDa



Immunoprecipitation - Anti-Kappa light chain antibody [EPR5367-8] (ab124727)

(ab124727) at 1/5000 dilution (Purified)

All lanes: Anti-Kappa light chain antibody [EPR5367-8]

Lane 1: Human tonsil lysate

Lane 2: Human plasma lysate

Lane 3: Human spleen lysate

Lysates/proteins at 15 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Purified ab124727 at 1/50 dilution (2µg) immunoprecipitating Kappa light chain in Human spleen lysate.

Lane 1 (input): Human spleen lysate 10µg

Lane 2 (+): ab124727 + Human spleen lysate.

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab124727 in Human spleen lysate.

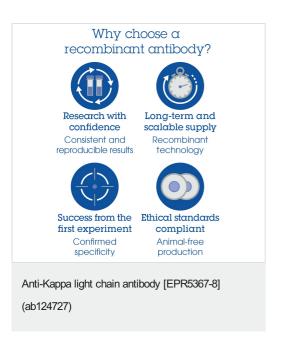
VeriBlot for IP Detection Reagent (HRP) (ab131366) (1/1000

dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 25 kDa



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