

## Product datasheet

### Anti-Kappa light chain antibody [4G7] ab1936

★★★★★ [4 Abreviews](#) [2 References](#) [1 Image](#)

#### Overview

<b>Product name</b>	Anti-Kappa light chain antibody [4G7]
<b>Description</b>	Mouse monoclonal [4G7] to Kappa light chain
<b>Host species</b>	Mouse
<b>Specificity</b>	Specific for independent constantly expressed epitope of kappa chain. Reacts with free and heavy chain-associated kappa chains.
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Full length protein corresponding to Human Kappa light chain.
<b>Positive control</b>	This antibody gave a positive result in IHC in the following FFPE tissue: Human normal tonsil.
<b>General notes</b>	<p>Concentration varies from lot to lot and can be provided on request.</p> <p>This product was changed from ascites to tissue culture supernatant in March 2015. Lot numbers higher than GR145316-1 will be from tissue culture supernatant. Please note that the dilutions may need to be adjusted accordingly.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	<p>pH: 7.40</p> <p>Preservative: 0.1% Sodium azide</p> <p>Constituent: PBS</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

<b>Clone number</b>	4G7
<b>Myeloma</b>	Sp2/0
<b>Isotype</b>	IgG2a

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab1936 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

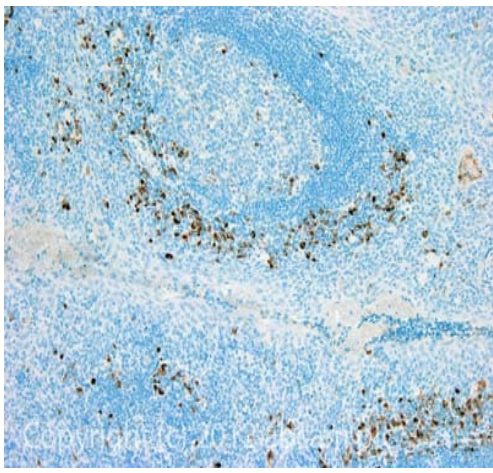
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration.

## 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 pentamer. 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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Kappa light chain antibody [4G7] (ab1936)

IHC image of Kappa light chain staining in Human normal tonsil formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab1936, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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

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