

## Product datasheet

# Anti-IgG2 antibody [EPR4418] ab134050

Recombinant RabMAb

[2 References](#) [8 Images](#)

### Overview

<b>Product name</b>	Anti-IgG2 antibody [EPR4418]
<b>Description</b>	Rabbit monoclonal [EPR4418] to IgG2
<b>Host species</b>	Rabbit
<b>Specificity</b>	ab134050 does not cross-react with human IgG1, IgG3 or IgG4.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, Flow Cyt (Intra), ELISA, ICC/IF <b>Unsuitable for:</b> IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human IgG2 aa 50-150. The exact sequence is proprietary.
<b>Positive control</b>	WB: IgG2 recombinant protein; Human spleen, and Human tonsil lysates. IHC-P: human tonsil and thyroid gland carcinoma tissue. ICC/IF: Raji cells. Flow Cyt (intra): Raji cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4418
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab134050 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
<b>WB</b>		1/5000. Detects a band of approximately 52 kDa (predicted molecular weight: 36 kDa). <b>For unpurified use at 1/10000-1/20000</b>
<b>IHC-P</b>		1/40000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b><u>IHC antigen retrieval protocols</u></b> . For unpurified use at 1/500-1/1000
<b>Flow Cyt (Intra)</b>		1/70.
<b>ELISA</b>		Use at an assay dependent concentration.
<b>ICC/IF</b>		1/50 - 1/100.

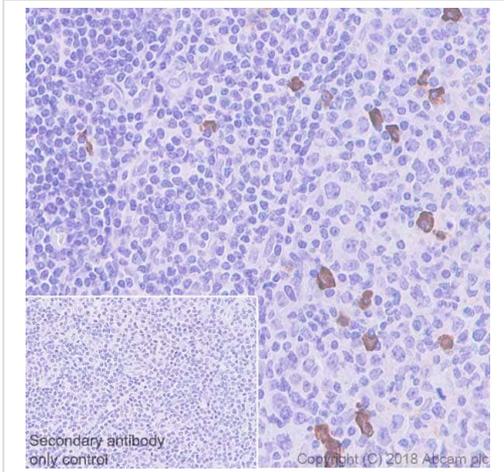
**Application notes** Is unsuitable for IP.

## Target

**Relevance** There are four IgG subclasses (IgG1, 2, 3 and 4) in humans, named in order of their abundance in serum (IgG1 being the most abundant). IgG2 is the only IgG subclass which passes through the placenta at a level generally lower than that found in the mother. A deficiency of IgG2 indicates a poor antibody response to bacterial polysaccharides and can lead to increased susceptibility to infections caused by encapsulated bacteria.

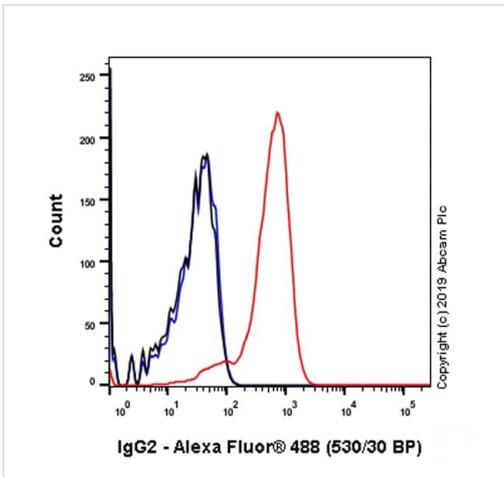
**Cellular localization** Secreted

## Images



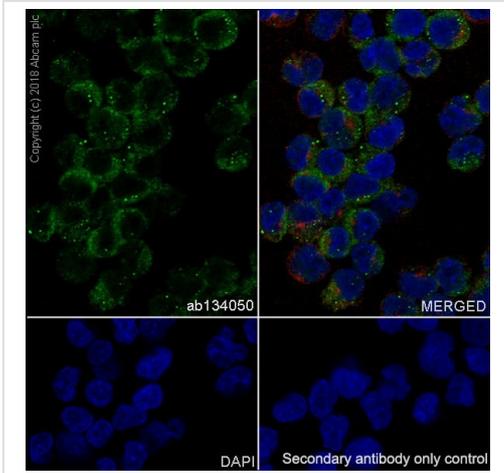
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IgG2 antibody [EPR4418] (ab134050)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue sections labeling IgG2 with purified ab134050 at 1:40000 dilution (0.025 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



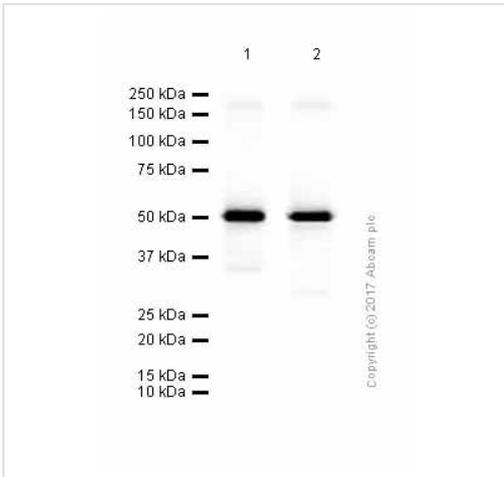
Flow Cytometry (Intracellular) - Anti-IgG2 antibody [EPR4418] (ab134050)

Intracellular Flow Cytometry analysis of Raji (human Burkitt's lymphoma cell line) cells labeling IgG2 with purified ab134050 at 1/100 dilution (10µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-IgG2 antibody [EPR4418] (ab134050)

Immunocytochemistry/ Immunofluorescence analysis of Raji (human Burkitt's lymphoma cell line) cells labeling IgG2 with purified ab134050 at 1:100 dilution (10 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-IgG2 antibody [EPR4418] (ab134050)

**All lanes :** Anti-IgG2 antibody [EPR4418] (ab134050) at 1/5000 dilution (Purified)

**Lane 1 :** Human spleen lysates

**Lane 2 :** Human tonsil lysates

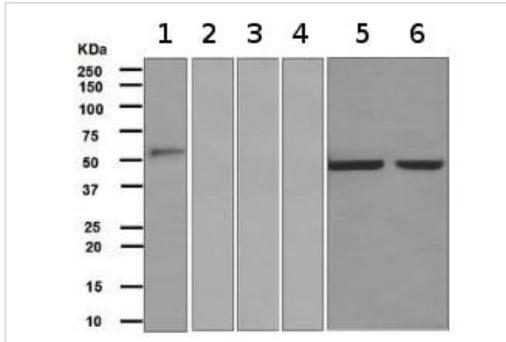
Lysates/proteins at 15 µg per lane.

**Secondary**

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

**Predicted band size:** 36 kDa

**Observed band size:** 52 kDa



Western blot - Anti-IgG2 antibody [EPR4418]  
(ab134050)

**All lanes** : Anti-IgG2 antibody [EPR4418] (ab134050) at 1/10000 dilution (Unpurified)

**Lane 1** : Human Recombinant IgG2 at 0.01  $\mu$ g

**Lane 2** : Human Recombinant IgG1 at 0.01  $\mu$ g

**Lane 3** : Human Recombinant IgG3 at 0.01  $\mu$ g

**Lane 4** : Human Recombinant IgG4 at 0.01  $\mu$ g

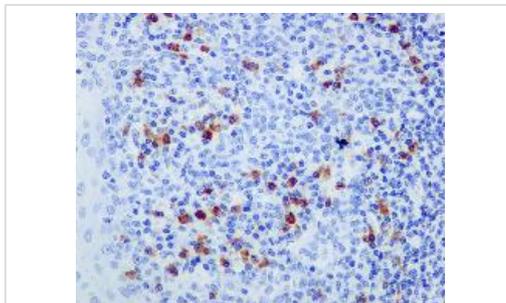
**Lane 5** : Human spleen lysate at 10  $\mu$ g

**Lane 6** : Human tonsil lysate at 10  $\mu$ g

#### Secondary

**All lanes** : HRP labelled goat anti-rabbit at 1/2000 dilution

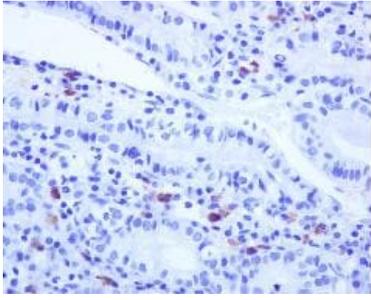
**Predicted band size:** 36 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IgG2 antibody [EPR4418]  
(ab134050)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling IgG2 with unpurified ab134050 at 1/500 dilution.

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IgG2 antibody [EPR4418] (ab134050)

Immunohistochemical analysis of paraffin-embedded human thyroid gland tissue labeling IgG2 with unpurified ab134050 at 1/500 dilution.

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

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-IgG2 antibody [EPR4418] (ab134050)

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

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