

## Product datasheet

# Anti-SIGIRR antibody [EPR22438-93] ab228977

Recombinant RabMAb

[3 References](#) [10 Images](#)

### Overview

<b>Product name</b>	Anti-SIGIRR antibody [EPR22438-93]
<b>Description</b>	Rabbit monoclonal [EPR22438-93] to SIGIRR
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), IHC-P, WB, IP <b>Unsuitable for:</b> ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Human kidney and colon tissue; Mouse kidney tissue; Rat kidney tissue WB: Hepa1-6 cell lysate; Mouse stomach, kidney, spleen and pancreas tissue lysate; Human stomach and fetal kidney lysate; Rat stomach and liver tissue lysate Flow Cyt (intra): MEF and Hepa1-6 cells IP: Hepa1-6 whole cell lysate
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <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> For more information <a href="#">see here</a> . 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> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

**Clone number**                      EPR22438-93  
**Isotype**                                IgG

## Applications

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**The Abpromise guarantee**        Our **Abpromise guarantee** covers the use of ab228977 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)		1/600.
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Detects a band of approximately 80 kDa (predicted molecular weight: 46 kDa).
IP		1/30.

**Application notes**                    Is unsuitable for ICC/IF.

## Target

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**Function**                                Acts as a negative regulator of the Toll-like and IL-1R receptor signaling pathways. Attenuates the recruitment of receptor-proximal signaling components to the TLR4 receptor, probably through an TIR-TIR domain interaction with TLR4. Through its extracellular domain interferes with the heterodimerization of IL1R1 and IL1RAP.

**Tissue specificity**                    Mainly expressed in epithelial tissues such as kidney, lung and gut.

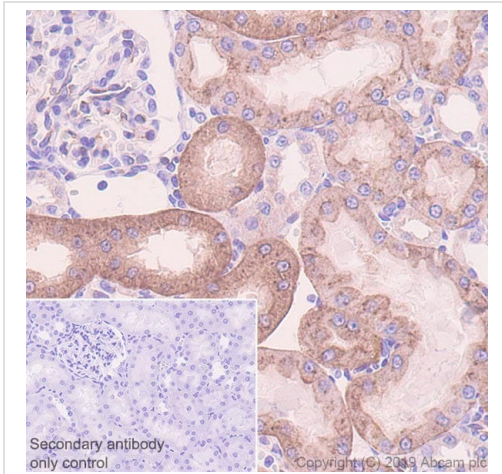
**Sequence similarities**                Belongs to the interleukin-1 receptor family.  
Contains 1 Ig-like C2-type (immunoglobulin-like) domain.  
Contains 1 TIR domain.

**Cellular localization**                Membrane.

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## Images

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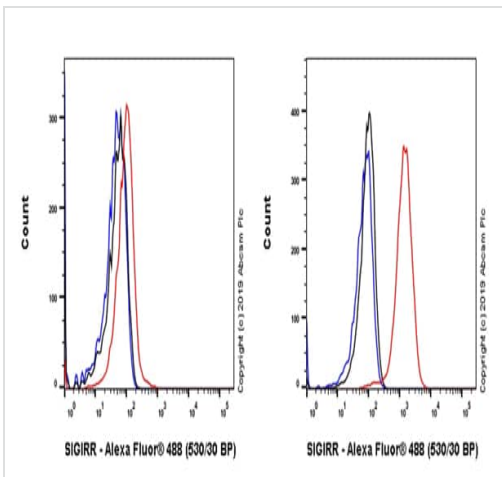


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SIGIRR antibody [EPR22438-93] (ab228977)

Immunohistochemical analysis of paraffin-embedded Rat kidney tissue labeling SIGIRR with ab228977 at 1/1000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on rat kidney (PMID:14715412, 12925853). The section was incubated with ab228977 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

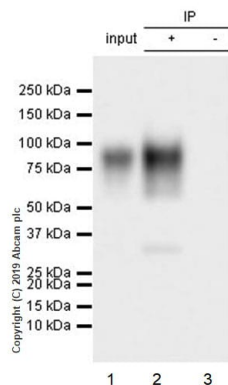


Flow Cytometry (Intracellular) - Anti-SIGIRR antibody [EPR22438-93] (ab228977)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized MEF (mouse embryonic fibroblast (immortalized)) (Left) / Hepa1-6 (mouse hepatoma epithelial cell line) (Right) cells labelling SIGIRR with ab228977 at 1/600 dilution (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat anti rabbit IgG (Alexa Fluor<sup>™</sup> 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.

**Negative control:** MEF (PMID 12925853).



Immunoprecipitation - Anti-SIGIRR antibody  
[EPR22438-93] (ab228977)

IGFBP5 was immunoprecipitated from 0.35 mg Hepa1-6 (mouse hepatoma epithelial cell line) whole cell lysate 10µg with **ab254324** at 1/30 dilution. Western blot was performed on the immunoprecipitate using ab228977 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used as the secondary antibody at 1/5000 dilution.

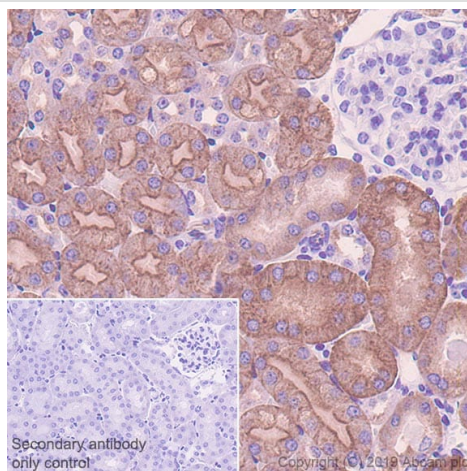
**Lane 1:** Hepa1-6 (mouse hepatoma epithelial cell) whole cell lysate 10µg

**Lane 2:** **ab254324** IP in Hepa1-6 whole cell lysate

**Lane 3:** Rabbit monoclonal IgG (**ab172730**) instead of ab228977 in Hepa1-6 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 5 seconds.

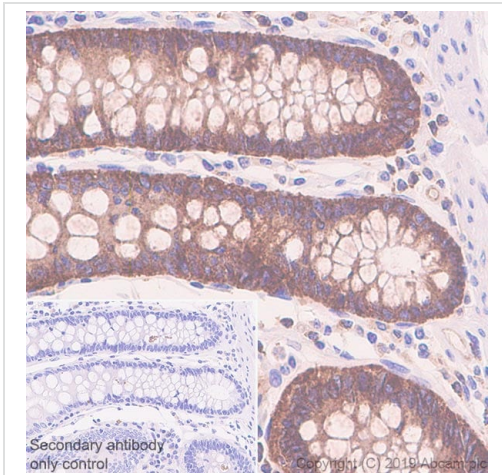


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SIGIRR antibody  
[EPR22438-93] (ab228977)

Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labeling SIGIRR with ab228977 at 1/1000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on mouse kidney (PMID:14715412, 12925853). The section was incubated with ab228977 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

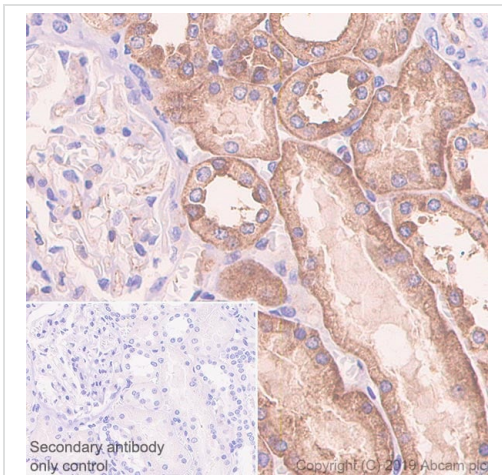


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SIGIRR antibody [EPR22438-93] (ab228977)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling SIGIRR with ab228977 at 1/1000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human colon (PMID:21077278) The section was incubated with ab228977 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

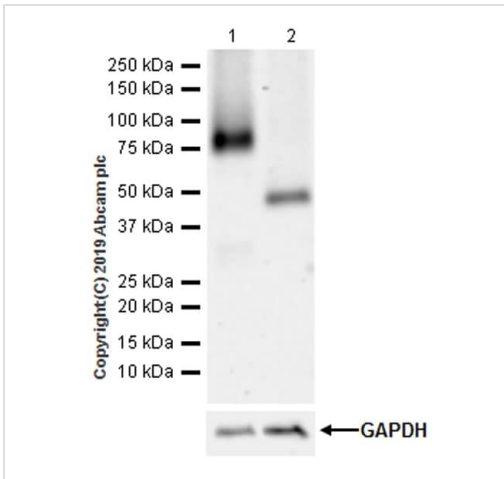


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SIGIRR antibody [EPR22438-93] (ab228977)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling SIGIRR with ab228977 at 1/1000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human kidney (PMID:14715412, 12925853) The section was incubated with ab228977 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).



Western blot - Anti-SIGIRR antibody [EPR22438-93] (ab228977)

**All lanes :** Anti-SIGIRR antibody [EPR22438-93] (ab228977) at 1/1000 dilution

**Lane 1 :** Mouse kidney tissue lysate

**Lane 2 :** Mouse kidney treated lysate treated with with PNGase F

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

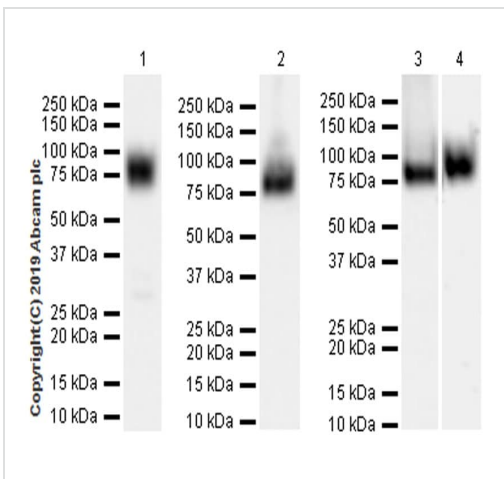
**Predicted band size:** 46 kDa

**Observed band size:** 46, 80 kDa

The molecular weight observed is consistent with what has been described in the literature (PMID: 26344057).

Blocking/Diluting buffer and concentration: 5% NFD/MTBST

Exposure time: 92 seconds.



Western blot - Anti-SIGIRR antibody [EPR22438-93] (ab228977)

**All lanes :** Anti-SIGIRR antibody [EPR22438-93] (ab228977) at 1/1000 dilution

**Lane 1 :** Human fetal kidney tissue lysate

**Lane 2 :** Rat liver tissue lysate

**Lane 3 :** Mouse kidney tissue lysate

**Lane 4 :** Mouse spleen tissue lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**Lane 1 :** VeriBlot for IP Detection Reagent (HRP) (**ab131366**) at 1/1000 dilution (VeriBlot for IP secondary antibody (HRP))

**Lanes 2-4 :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 46 kDa

**Observed band size:** 80 kDa

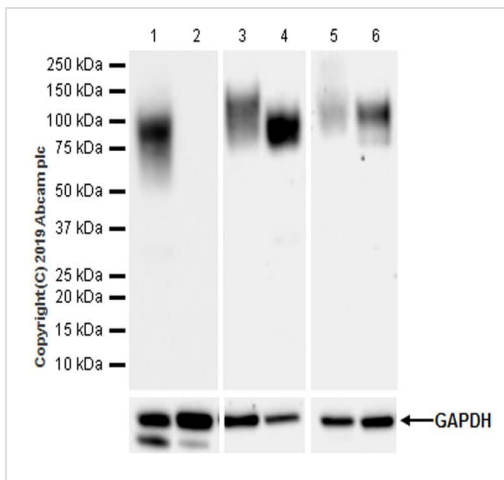
The different apparent molecular weights are due to different levels of glycosylation. (PMID: 26344057).

Exposure times.

Lane 1: 48 seconds; Lane 2: 7.75 seconds; Lane 3: 70 seconds;

Lane 4: 3 minutes.

Blocking/diluting buffer and concentration: 5% NFD/MTBST.



Western blot - Anti-SIGIRR antibody [EPR22438-93] (ab228977)

**All lanes :** Anti-SIGIRR antibody [EPR22438-93] (ab228977) at 1/1000 dilution

**Lanes 1 & 5 :** Hepa1-6 (mouse hepatoma epithelial cell), whole cell lysate

**Lane 2 :** MEF (immortalized mouse embryonic fibroblasts), whole cell lysate

**Lane 3 :** Mouse stomach tissue lysate

**Lane 4 :** Mouse pancreas tissue lysate

**Lane 6 :** Rat stomach tissue lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**Lanes 1-4 & 6 :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Lane 5 :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution (Human stomach tissue lysate)

**Predicted band size:** 46 kDa

**Observed band size:** 80 kDa

The different apparent molecular weights are due to different levels of glycosylation. (PMID: 26344057).




**Negative control:** MEF (PMID 12925853)

Blocking/Diluting buffer and concentration: 5% NFD/MTBST.

Exposure times.

Lane 1: 15 seconds; Lanes 2-6: 3 minutes.

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-SIGIRR antibody [EPR22438-93] (ab228977)

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

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