# abcam

# Product datasheet

# Anti-RAGE antibody [1C1] ab54741

★★★★★ <u>5 Abreviews</u> <u>19 References</u> 5 图像

概述

产品名称 Anti-RAGE抗体[1C1]

描述 小鼠单克隆抗体[1C1] to RAGE

**宿主** Mouse

经测试应用 适用于: WB, IP, IHC-P

种属反应性 与反应: Human, Recombinant fragment

免疫原 Recombinant full length protein (GST-tag) corresponding to Human RAGE aa 23-405. Full length

mature chain, without signal peptide.

Database link: Q15109

阳性对照 WB: Human kidney tissue lysate. RAGE transfected HEK-293T cell lysate. Recombinant RAGE

protein. Flow Cytometry: Jurkat cells. IHC-P: Human lung tissue.

常规说明 This product was changed from ascites to tissue culture supernatant on 13<sup>th</sup> Feb 2019. Please

note that the dilutions may need to be adjusted accordingly. If you have any questions, please do

not hesitate to contact our scientific support team.

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.

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&As

性能

形式 Liquid

**存放说明** Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

**存储溶液** pH: 7.40

Constituent: PBS

In 1x PBS

纯**度** Tissue culture supernatant

1

 克隆
 单克隆

 克隆编号
 1C1

 同种型
 lqG2a

轻链类型 kappa

### 应用

## The Abpromise quarantee Abpromise™承诺保证使用ab54741于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★ ★ ★ ★ ★ (3)	Use at an assay dependent concentration. Predicted molecular weight: 43 kDa.  This antibody has only been tested in WB against the recombinant fragment used as immunogen. We have no data on the detection of endogenous protein in Western blot
IP		Use at an assay dependent concentration.
IHC-P	<b>★</b> ★ ★ ★ <b>(1)</b>	Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

### 靶标

功能 Mediates interactions of advanced glycosylation end products (AGE). These are nonenzymatically

glycosylated proteins which accumulate in vascular tissue in aging and at an accelerated rate in diabetes. Acts as a mediator of both acute and chronic vascular inflammation in conditions such as atherosclerosis and in particular as a complication of diabetes. AGE/RAGE signaling plays an important role in regulating the production/expression of TNF-alpha, oxidative stress, and endothelial dysfunction in type 2 diabetes. Interaction with \$100A12 on endothelium, mononuclear phagocytes, and lymphocytes triggers cellular activation, with generation of key proinflammatory mediators. Interaction with \$100B after myocardial infarction may play a role in myocyte apoptosis by activating ERK1/2 and p53/TP53 signaling (By similarity). Receptor for amyloid beta peptide. Contributes to the translocation of amyloid-beta peptide (ABPP) across the cell membrane from the extracellular to the intracellular space in cortical neurons. ABPP-initiated RAGE signaling, especially stimulation of p38 mitogen-activated protein kinase (MAPK), has the capacity to drive a transport system delivering ABPP as a complex with RAGE to the

intraneuronal space.

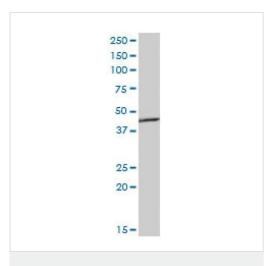
组织特异性 Endothelial cells.

序列相似性 Contains 2 lg-like C2-type (immunoglobulin-like) domains.

Contains 1 lg-like V-type (immunoglobulin-like) domain.

细胞定位 Secreted and Cell membrane.

## 图片



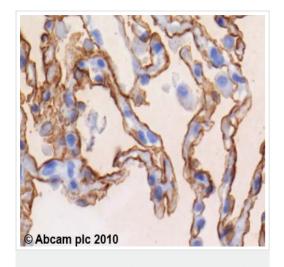
Western blot - Anti-RAGE antibody [1C1] (ab54741)

Anti-RAGE antibody [1C1] (ab54741) at 1  $\mu$ g/ml + Human kidney tissue lysate

Developed using the ECL technique.

Predicted band size: 43 kDa

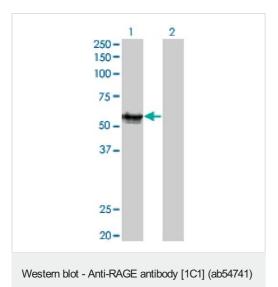
This image was generated using the ascites version of the product.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-RAGE antibody [1C1] (ab54741)

ab54741 (1 µg/ml) staining RAGE in human lung using an automated system (DAKO Autostainer Plus). Using this protocol there is membrane staining throughout the alveloli. Sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffer citrate pH 6.0 in a DAKO PT link. Slides were peroxidase blocked in 3% H<sub>2</sub>O<sub>2</sub> in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that, for manual staining, optimization of primary antibody concentration and incubation time is recommended. Signal amplification may be required.

This image was generated using the ascites version of the product.



All lanes: Anti-RAGE antibody [1C1] (ab54741) at 1 µg/ml

**Lane 1 :** HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) RAGE transfected cell lysate

Lane 2: HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) non-transfected cell lysate

Developed using the ECL technique.

Predicted band size: 43 kDa

175 -83 -62 -47.5 -32.5 -25 -

Western blot - Anti-RAGE antibody [1C1] (ab54741)

This image was generated using the ascites version of the product.

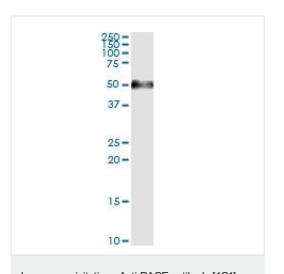
Anti-RAGE antibody [1C1] (ab54741) at 1 µg/ml + tagged recombinant protein immunogen

Developed using the ECL technique.

Predicted band size: 43 kDa

Predicted band size of immunogen is 68 kDa

This image was generated using the ascites version of the product.



Immunoprecipitation of RAGE transfected lysate using ab54741 and Protein A Magnetic Bead. Immunoblotted with a rabbit polyclonal anti-RAGE antibody.

This image was generated using the ascites version of the product.

Immunoprecipitation - Anti-RAGE antibody [1C1] (ab54741)

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