# abcam

## Product datasheet

# Anti-RAGE antibody [EPR12206] ab172473

Recombinant RabMAb

### 6 References 2 Images

Overview		
Product name	Anti-RAGE antibody [EPR12206]	
Description	Rabbit monoclonal [EPR12206] to RAGE	
Host species	Rabbit	
Specificity	Recent tests in our laboratory showed that the antibody detects the band of interest in tissue lysates, but it did not detect the protein in cell lysate.	
	RAGE is typically expressed at low levels under normal physiological conditions in majority of tissues except normal lung tissue. When testing other tissues, please use lung tissue as a positive control.	
Tested applications	Suitable for: WB Unsuitable for: ICC/IF,IHC-P or IP	
Species reactivity	Reacts with: Mouse, Rat Does not react with: Human	
Immunogen	Synthetic peptide within Human RAGE aa 350 to the C-terminus (Cysteine residue). The exact sequence is proprietary. Database link: <u>Q15109</u>	
Positive control	Mouse lung, Rat lung.	
General notes	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <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> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit</li> </ul>	
	Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b>RabMAb<sup>®</sup> patents</b> .	

#### **Properties**

Form	Liquid
Storage instructions	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.

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA	
Purity	Protein A purified	
Clonality	Monoclonal	
Clone number	EPR12206	
lsotype	lgG	

#### **Applications**

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab172473 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		1/1000 - 1/10000. Predicted molecular weight: 42 kDa. We recommend <b>ab181369</b> for human samples.

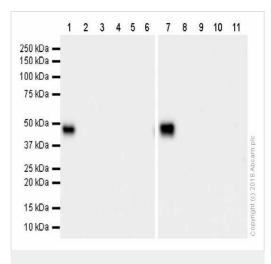
#### **Application notes**

Is unsuitable for ICC/IF,IHC-P or IP.

#### Target

#### Function 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 S100A12 on endothelium, mononuclear phagocytes, and lymphocytes triggers cellular activation, with generation of key proinflammatory mediators. Interaction with S100B 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. **Tissue specificity** Endothelial cells. **Sequence similarities** Contains 2 lg-like C2-type (immunoglobulin-like) domains. Contains 1 lg-like V-type (immunoglobulin-like) domain. **Cellular localization** Secreted and Cell membrane.

#### Images



Western blot - Anti-RAGE antibody [EPR12206] (ab172473) All lanes : Anti-RAGE antibody [EPR12206] (ab172473) at 1/1000 dilution

Lane 1 : Mouse lung lysates Lane 2 : Mouse brain lysates Lane 3 : Mouse kidney lysates Lane 4 : Mouse heart lysates Lane 5 : Mouse liver lysates Lane 6 : Mouse spleen lysates Lane 7 : Rat lung lysates Lane 8 : Rat brain lysates with 5% NFDM/TBST Lane 9 : Rat kidney lysates Lane 10 : Rat heart lysates Lane 11 : Rat spleen lysates

Lysates/proteins at 20 µg per lane.

#### Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 42 kDa Observed band size: 43 kDa

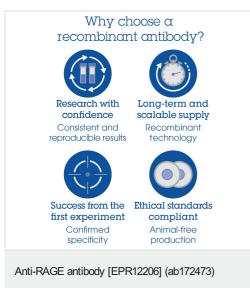
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time:

Lane 1 to 6: 3 second

Lane 7 to 11: 20 seconds

The expression profile and molecular mass observed is consistent with what has been described in the literature (PMID: 16315007; 18355449; 18245812)



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