




Rabbit Anti-RAGE antibody

SL0177R

Product Name:	RAGE
Chinese Name:	晚期糖基化终末产物特异性受体抗体
Alias:	Advanced glycosylation end product specific receptor; Advanced glycosylation end product-specific receptor; AGER; EC 2.7.11.22; LE 9211 A antigen;LE-9211-A antigen; MGC22357; MOK; RAGE 1; RAGE1; MOK protein kinase; Receptor for advanced glycation endproducts;Renal tumor antigen 1; Renal tumor antigen; Renal cell carcinoma antigen (MOK protein kinase); Renal tumor antigen 1; RAGE_HUMAN.
文献引用 	<p>Specific References(5) SL0177R has been referenced in 5 publications.</p> <p>[IF=3.73]Yu, Wei, et al. "Curcumin Alleviates Diabetic Cardiomyopathy in Experimental Diabetic Rats." PloS one 7.12 (2012): e52013.WB;Rat. PubMed:23251674</p> <p>[IF=2.61]Huang, Li-feng, et al. "The effect of high-mobility group box 1 protein on activity of regulatory T cells after thermal injury in rats." Shock 31.3 (2009): 322.other;Rat. PubMed:18665051</p> <p>[IF=2.50]Zhu, Xiao-mei, et al. "Anti-RAGE antibody ameliorates severe thermal injury in rats through regulating cellular immune function." Acta Pharmacologica Sinica (2014).other;Rat. PubMed:25152026</p> <p>[IF=2.73]Sun, Yan-Na, et al. "Effects of insulin combined with idebenone on blood-brain barrier permeability in diabetic rats." Journal of Neuroscience Research (2014).WB;Rat. PubMed:25421718</p>

	<p>[IF=3.88]Fu, Juanli, et al. "Tetrachlorobenzoquinone exerts neurological pro-inflammatory activity by promoting HMGB1 release, which induces TLR4 clustering within the lipid raft." Toxicological Sciences (2016): kfw124.WB;Rat.</p> <p style="text-align: right;">PubMed:27413111</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	<p>WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/testICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair)</p> <p>not yet tested in other applications.</p> <p>optimal dilutions/concentrations should be determined by the end user.</p>
Molecular weight:	42kDa
Cellular localization:	The cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from rat AGER:151-250/403<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>Advanced glycosylation end product-specific receptor (AGER; RAGE) is a member of the immunoglobulin superfamily of cell surface molecules that binds molecules that have been irreversibly modified by non-enzymatic glycation and oxidation, and are know as advanced glycation end products (AGEs). It is expressed by endothelium, mononuclear phagocytes, neurons and smooth muscle cells. Whereas RAGE is present at high levels during development, especially in the central nervous system, its levels decline during maturity.The increased expression of RAGE is associated with several pathological states, such as diabetic vasculopathy, neuropathy, retinopathy and other disorders, including Alzheimer's disease and immune/inflammatory reactions of the vessel walls. In diabetic tissues, the production of RAGE is due to the overproduction of AGEs that eventually overwhelm the protective properties of RAGE. This results in oxidative stress and endothelial cell dysfunction that leads to vascular disease in diabetics. In the brain, RAGE also binds amyloid beta (Ab). Because Ab is overproduced in neurons and vessels in the brains of Alzheimer disease, this leads to the hyperstimulation of RAGE. The RAGE-Ab interaction is thought to result in oxidative stress leading to neuronal degeneration.</p> <p>Function: Mediates interactions of advanced glycosylation end products (AGE). These are nonenzymatically glycosylated proteins which accumulate in vascular tissue in aging</p>

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. 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. Interaction with S100B after myocardial infarction may play a role in myocyte apoptosis by activating ERK1/2 and p53/TP53 signaling.

Subunit:

Interacts with S100B, S100A1 and APP. Interacts with S100A12.

Subcellular Location:

Isoform 1: Cell membrane; Single-pass type I membrane protein.

Isoform 2: Secreted.

Tissue Specificity:

Endothelial cells and cardiomyocytes.

Similarity:

Contains 2 Ig-like C2-type (immunoglobulin-like) domains.

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

SWISS:

Q63495

Gene ID:

81722

Database links:

[Entrez Gene: 177](#) Human

[Entrez Gene: 11596](#) Mouse

[Entrez Gene: 81722](#) Rat

[Omim: 600214](#) Human

[SwissProt: Q15109](#) Human

[SwissProt: Q62151](#) Mouse

[SwissProt: Q63495](#) Rat

[Unigene: 534342](#) Human

[Unigene: 3383](#) Mouse

[Unigene: 9829](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

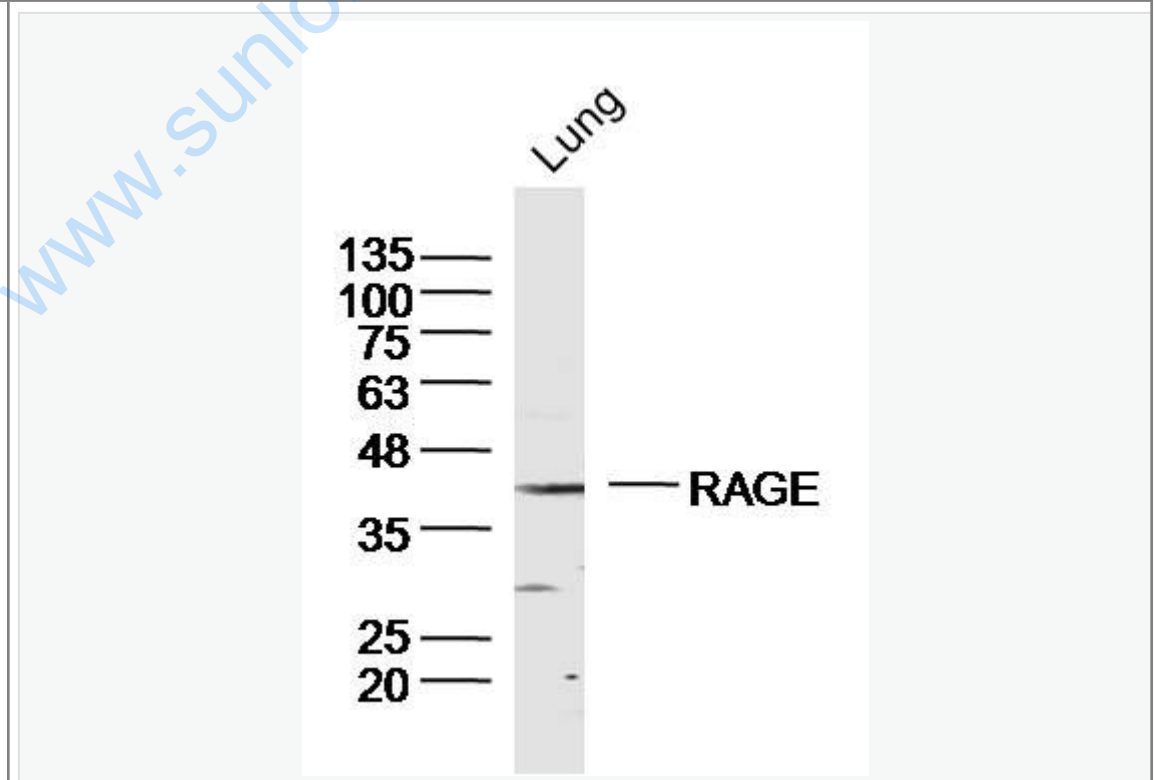
晚期糖基化终末产物受体(AGER)与其配体AGEs形成的AGEs-AGER系统在Diabetes血管病变的发生、发展过程中起着重要作用。

年龄及晚期糖基化终末产物(AGEs)等多种因素均能调节AGER基因的表达。

Diabetes患者体内晚期糖基化终末产物受体(AGER)的高表达加速了病人血管病变的发展过程,并增加了病变的复杂性.阻断AGER通路可缓解Diabetes血管的病变过程。

因此,AGER可以作为治疗Diabetes血管病变的药物靶点,并为临床治疗Diabetes血管病变提供了新的思路。

Picture:



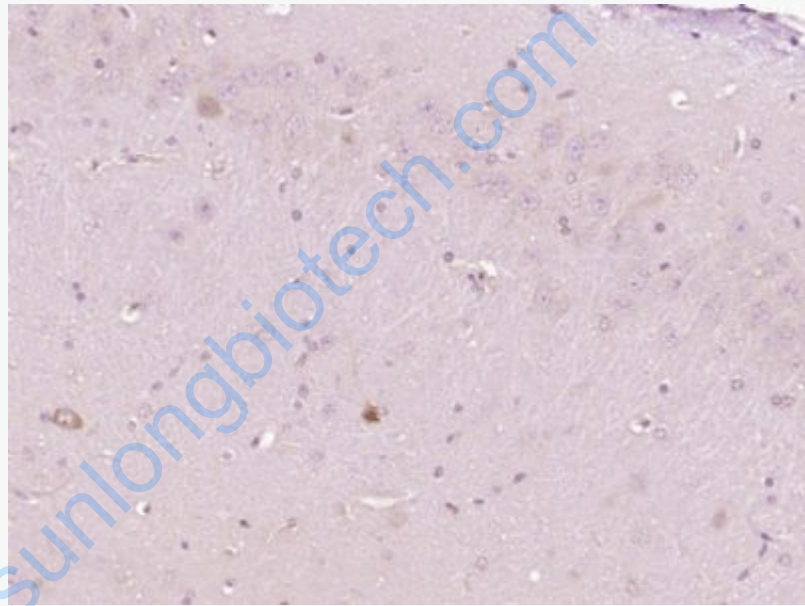
Sample: lung (mouse) Lysate at 40 ug

Primary: Anti-RAGE (SL0177R) at 1/300 dilution

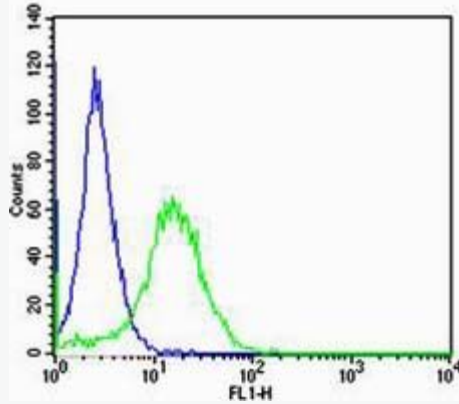
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 42kD

Observed band size: 42 kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (RAGE) Polyclonal Antibody, Unconjugated (SL0177R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Cell: NIH/3T3

Concentration: 1:100

Host/Isotype: Rabbit/IgG

Flow cytometric analysis of Rabbit IgG isotype control (Cat#: bs-0177R) on NIH/3T3 (green) compared with control in the absence of primary antibody (blue) followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG(H+L) secondary antibody .