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RAGE (AGER) Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2401B

Specification

RAGE (AGER) Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q15109
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	42803
Antigen Region	348-378

RAGE (AGER) Antibody (C-term) - Additional Information

Gene ID 177

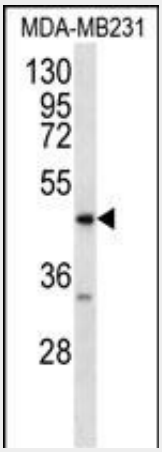
Other Names
Advanced glycosylation end product-specific receptor, Receptor for advanced glycosylation end products, AGER, RAGE

Target/Specificity
This RAGE (AGER) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 348-378 amino acids from the C-terminal region of human RAGE (AGER).

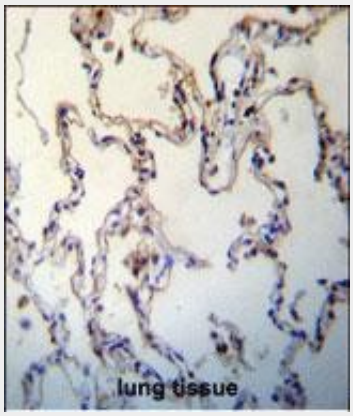
Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



AGER Antibody (W363) (Cat. #AP2401b) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the AGER antibody detected the AGER protein (arrow).



RAGE(AGER) Antibody (C-term) (Cat. #AP2401b)immunohistochemistry analysis in formalin fixed and paraffin embedded human lung tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of RAGE(AGER) Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

RAGE (AGER) Antibody (C-term) - Background

Precautions
RAGE (AGER) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RAGE (AGER) Antibody (C-term) - Protein Information

Name AGER

Synonyms RAGE

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. Can also bind oligonucleotides.

Cellular Location
[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Isoform 10]: Cell membrane; Single-pass type I membrane protein

Tissue Location
Endothelial cells.

This gene encodes a member of the immunoglobulin superfamily of cell surface molecules. It is a receptor for various molecules, including the amyloidogenic form of serum amyloid A, amyloid-beta protein, members of the S100/calgranulin superfamily and advanced glycation end products. The gene lies within the major histocompatibility complex (MHC) class III region on chromosome 6.

RAGE (AGER) Antibody (C-term) - References

Schlueter, C., et al., Biochim. Biophys. Acta 1630(1):1-6 (2003).
Shanmugam, N., et al., J. Biol. Chem. 278(37):34834-34844 (2003).
Kuniyasu, H., et al., Oncol. Rep. 10(2):445-448 (2003).
Hsieh, H.L., et al., Biochem. Biophys. Res. Commun. 307(2):375-381 (2003).
Rocken, C., et al., Am. J. Pathol. 162(4):1213-1220 (2003).

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RAGE (AGER) Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RAGE (AGER) Antibody (C-term) - Citations

- S100A9 aggravates bleomycin-induced dermal fibrosis in mice via activation of ERK1/2 MAPK and NF-κB pathways.
- Expression of receptor for advanced glycation end-products (RAGE) in thymus from myasthenia patients.