

AGER Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4861A

Specification

AGER Antibody (N-term) - Product Information

Application WB, IHC-P, FC,E

Primary Accession <u>Q15109</u>

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit Ig
Antigen Region 24-52

AGER Antibody (N-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 AGER antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 24-52 amino acids from the N-terminal region of human AGER.

Dilution

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

Format

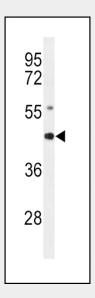
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

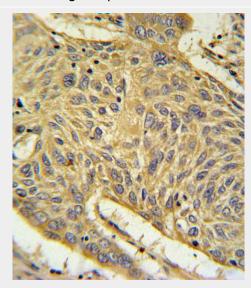
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AGER Antibody (N-term) is for research use



Western blot analysis of AGER Antibody (N-term) (cat. #AP4861a) in mouse lung tissue lysates (35ug/lane). AGER (arrow) was detected using the purified Pab.



AGER Antibody (N-term) (Cat. #AP4861a) IHC analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the AGER Antibody (N-term) for immunohistochemistry. Clinical



only and not for use in diagnostic or therapeutic procedures.

AGER Antibody (N-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.

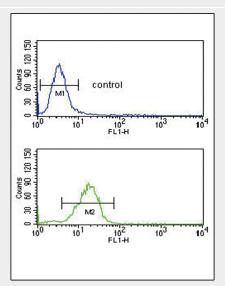
Cellular Location

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

Tissue Location Endothelial cells.

AGER Antibody (N-term) - Protocols

relevance has not been evaluated.



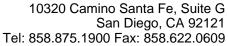
AGER Antibody (N-term) (Cat. #AP4861a) flow cytometric analysis of U251 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

AGER Antibody (N-term) - Background

AGER 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.

AGER Antibody (N-term) - References

Rojas, A., et al. Carcinogenesis 31(3):334-341(2010)
Engelen, L., et al. J. Hypertens. 28(2):285-293(2010)
Poon, P.Y., et al. Clin. Nephrol. 73(1):44-50(2010)
Hancock, D.B., et al. Nat. Genet. 42(1):45-52(2010)





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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture