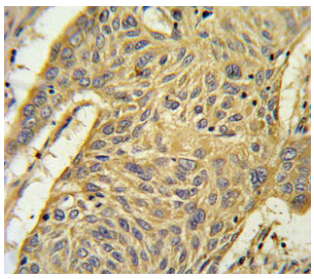
AGER Antibody / RAGE (F55116)

Catalog No.	Formulation	Size
F55116-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F55116-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

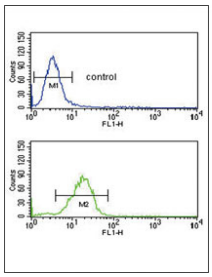
Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q15109
Applications	Western Blot : 1:500-1:1000 Immunohistochemistry (FFPE) : 1:10-1:50 Flow Cytometry : 1:10-1:50 per million cells in 0.1ml
Limitations	This AGER antibody is available for research use only.



IHC staining of FFPE human lung carcinoma tissue with AGER antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.

Western blot testing of mouse lung tissue lysate with AGER antibody. Predicted molecular weight: 45-55 kDa depending on glycosylation level.



Flow cytometry testing of human U-251 cells with AGER antibody; Blue=isotype control, Green= AGER antibody.

Description

AGER is a cell surface receptor that is specifically activated by AGEs, which are formed when sugars react non-enzymatically with proteins or lipids. These AGEs are known to accumulate in various tissues over time, contributing to the development of complications like diabetic nephropathy, retinopathy, and neuropathy. AGER acts as a receptor for these AGEs, signaling pathways that lead to inflammation, oxidative stress, and tissue damage. Understanding the role of AGER in diabetes-related complications has significant implications for the development of novel therapeutic strategies. By targeting AGER and its downstream signaling pathways, researchers hope to mitigate the harmful effects of AGE accumulation in diabetic patients. In fact, recent studies have shown that blocking AGER with specific inhibitors can reduce inflammation and oxidative stress in diabetic animal models, offering promise for future treatments. In addition to its role in diabetes, AGER has also been implicated in other age-related diseases, such as Alzheimer's and cardiovascular disease. By studying the mechanisms by which AGER mediates these diseases, researchers can gain valuable insights into the underlying pathophysiology and identify new targets for intervention.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the AGER antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 24-52 from the human protein was used as the immunogen for this AGER antibody.

Storage

Store at 4oC for up to one month. For long term, aliquot the AGER antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.