**BACKGROUND**

Advanced glycosylation end products of proteins (AGEs) are nonenzymatically glycosylated proteins that are associated with a variety of conditions including diabetes and other vascular disorders, as well as amyloidosis. These proteins regulate cellular functions via specific cell surface acceptor molecules, such as RAGE (receptor for advanced glycosylation end products). RAGE is a type 1 membrane protein that is found on the surface of endothelial cells, mononuclear phagocytes and vascular smooth muscle cells. Binding of AGEs to RAGE results in the induction of cellular oxidant stress and activation of the transcription factor NFκB. Evidence suggests that the induction of oxidant stress results in the activation of an intracellular cascade involving p21 Ras and MAP kinase, which leads to activation of transcription.

**CHROMOSOMAL LOCATION**

Genetic locus: AGER (human) mapping to 6p21.32; Ager (mouse) mapping to 17 B1.

**SOURCE**

RAGE (A11) is a mouse monoclonal antibody raised against a truncated extracellular domain of RAGE of human origin.

**PRODUCT**

Each vial contains 200 μg IgG₂κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RAGE (A11) is available conjugated to agarose (sc-80652 AC), 500 μg/0.25 ml agarose in 1 ml, for IP, to HRP (sc-80652 HRP), 200 μg/ml, for WB, IHC/IP and ELISA; to either phycoerythrin (sc-80652 PE), fluorescein (sc-80652 FITC), Alexa Fluor® 488 (sc-80652 AF488), Alexa Fluor® 546 (sc-80652 AF546), Alexa Fluor® 647 (sc-80652 AF647), 200 μg/ml, for WB (RGB), IF, IHC/IP and FCM; and to either Alexa Fluor® 680 (sc-80652 AF680) or Alexa Fluor® 790 (sc-80652 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

RAGE (A11) is recommended for detection of natural and recombinant RAGE of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:50-1:1000), immunoprecipitation (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

RAGE (A11) is also recommended for detection of natural and recombinant RAGE in additional species, including bovine.


Molecular Weight of RAGE: 46 kDa.

Positive Controls: HUV-EC-C whole cell lysate: sc-364180.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

![Data Image]

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

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