

## RAGE Active Protein | AGER active protein

RAGE Protein, Human, Recombinant (His Tag)

CATALOG #  
**AAA257986**

HOST  
**HEK293 Cells**

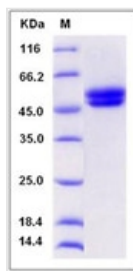
### PRODUCT SYNONYMS

RAGE; RAGE Protein; Human; Recombinant (His Tag); Human AGER/RAGE Protein (His Tag); advanced glycosylation end product-specific receptor; AGER active protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | HEK293 Cells                                                                                                                                                                                                                                                                                                                                                   |
| Purity/Purification     | >98% as determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                 |
| Form/Format             | Lyophilized from sterile PBS, pH7.4, 5% Trehalose, 5% Mannitol, 0.01% Tween-80                                                                                                                                                                                                                                                                                 |
| Source                  | Human                                                                                                                                                                                                                                                                                                                                                          |
| Endotoxin               | <1.0EU per ug of the protein as determined by the LAL method                                                                                                                                                                                                                                                                                                   |
| Protein Construction    | A DNA sequence encoding the mature form of human AGER (NP_001127) extracellular domain (Met1-Ala 344) was expressed with a polyhistidine tag at the C-terminus.                                                                                                                                                                                                |
| Reconstitution          | It is recommended that sterile water (400ul) be added to the vial to prepare a stock solution of 0.25mg/mL. Concentration is measured by UV.                                                                                                                                                                                                                   |
| Activity                | <ol style="list-style-type: none"> <li>1. Measured by its binding ability in a functional ELISA.</li> <li>2. Immobilized recombinant human AGER-His at 10ug/mL (100uL/well) can bind biotinylated mouse His-S100A1 with a linear range of 15.6-250ng/mL.</li> <li>3. Measured by its ability to bind biotinylated human S100A1 in functional ELISA.</li> </ol> |
| Sequence                | Met1-Ala344                                                                                                                                                                                                                                                                                                                                                    |
| Preparation and Storage | <p>Samples are stable for up to twelve months from date of receipt at -70°C.</p> <p>Store it under sterile conditions at -20°C to -80°C upon receipt. It is recommended that the protein be aliquoted into smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles.</p>                                                                      |

### IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for AGER active protein | Receptor for Advanced Glycosylation End Products (RAGE, or AGER) is a member of the immunoglobulin super-family transmembrane proteins, as a signal transduction receptor which binds advanced glycation endproducts, certain members of the S100/calgranulin family of proteins, high mobility group box 1 (HMGB1), advanced oxidation protein products, and amyloid (beta-sheet fibrils). Initial studies investigating the role of RAGE in renal dysfunction focused on diabetes, neurodegenerative disorders, and inflammatory responses. However, RAGE also has roles in the pathogenesis of renal disorders that are not associated with diabetes, such as obesity-related glomerulopathy, doxorubicin-induced nephropathy, hypertensive nephropathy, lupus nephritis, renal amyloidosis, and ischemic renal injuries. RAGE represents an important factor in innate immunity against pathogens, but it also interacts with endogenous ligands, resulting in chronic inflammation. RAGE signaling has been implicated in multiple human illnesses, including atherosclerosis, arthritis, Alzheimer's disease, atherosclerosis and aging associated diseases. |
| References                                          | Zhou Z, et al. (2011) RAGE and its ligands in bone metabolism. Front Biosci (Schol Ed). 3: 768-76.Mosquera JA. (2010) Role of the receptor for advanced glycation end products (RAGE) in inflammation]. Invest Clin. 51(2): 257-68.D'Agati V, et al. (2010) RAGE and the pathogenesis of chronic kidney disease. Nat Rev Nephrol. 6(6): 352-60.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 10835203                                                                                                                                                                                  |
| NCBI GeneID                      | 177                                                                                                                                                                                       |
| NCBI Accession #                 | NP_001127                                                                                                                                                                                 |
| NCBI GenBank Nucleotide #        | NM_001136.4                                                                                                                                                                               |
| UniProt Accession #              | Q15109; Q15279; Q3L1R4; Q3L1R5; Q3L1R6; Q3L1R7; Q3L1R8; Q3L1S0; A2BFI7; A6NKF0; A7Y2U9; B0V176                                                                                            |
| Molecular Weight                 | The recombinant human AGER consists of 332 amino acids and predicts a molecular weight of 35.5 kDa, It migrates as an approximately 47-53 kDa band in SDS-PAGE under reducing conditions. |
| NCBI Official Full Name          | advanced glycosylation end product-specific receptor isoform 1                                                                                                                            |
| NCBI Official Synonym Full Names | advanced glycosylation end-product specific receptor                                                                                                                                      |
| NCBI Official Symbol             | AGER                                                                                                                                                                                      |
| NCBI Official Synonym Symbols    | RAGE; SCARJ1                                                                                                                                                                              |
| NCBI Protein Information         | advanced glycosylation end product-specific receptor                                                                                                                                      |
| UniProt Protein Name             | Advanced glycosylation end product-specific receptor                                                                                                                                      |
| UniProt Gene Name                | AGER                                                                                                                                                                                      |
| UniProt Synonym Gene Names       | RAGE                                                                                                                                                                                      |
| UniProt Entry Name               | RAGE_HUMAN                                                                                                                                                                                |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.