

Recombinant Protein Technical Manual

Recombinant Mouse AGER/RAGE Protein (His Tag)(Active) RPES2505

Product Data:

Product SKU: RPES2505 **Size:** 50μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: NP 031451.2

Protein Information:

Molecular Mass: 35.3 kDa

AP Molecular Mass: 48 kDa

Tag: C-His

Bio-activity: Measured by its ability to bind mouse HMGB1-Fc in functional ELISA.

Purity: > 96 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: RAGE

Immunogen Information:

Sequence: Met 1-Ala 342

Background:

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 \$100/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.