Recombinant Protein Technical Manual

Recombinant Human AGER/RAGE Protein (Active)

RPES0559

Product Data:

Product SKU: RPES0559

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001127.1

Protein Information:

Molecular Mass: 35 kDa

AP Molecular Mass: 46-52 kDa

Tag:

Bio-activity: 1. Measured by its ability to compete with Biotinylated recombinant human AGER for binding to immobilized recombinant human Fc-S100B in a functional ELISA.2. Measured by its ability to compete with Biotinylated recombinant human AGER for binding to immobilized recombinant mouse S100B-Fc in a functional ELISA.3. Measured by its ability to compete with Biotinylated recombinant human AGER for binding to immobilized recombinant human S100A1-Fc in a functional ELISA.4. Measured by its ability to compete with Biotinylated recombinant human AGER for binding to immobilized recombinant human APP-Fc in a functional ELISA.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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: Advanced Glycosylation End Product-Specific Receptor; Receptor for Advanced Glycosylation End Products; AGER; RAGE

Immunogen Information:

Sequence: Met 1-Ala 344

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 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.