

Recombinant Human RAGE / Receptor for Advanced Glycation End Products, Animal Free & Carrier Free

Cat #: C-CYP361

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

RAGE (receptor for advanced glycation endproducts), also called AGER, is a 35 kilodalton transmembrane receptor of the immunoglobulin super family, as a signal transduction receptor which binds advanced glycation endproducts, certain members of the S1/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.

Product Information

Source: *Escherichia Coli*.

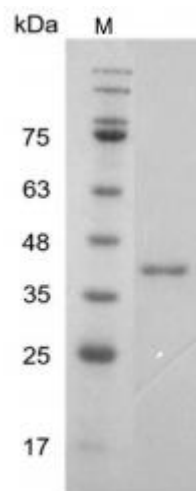
Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

Endotoxin: <0.1EU per 1µg of the protein by the LAL method.

Amino acid sequence:

GRTEAWKVLSPQGGGPWDSVARVLPNGSLFLPAVGIQDEGIFRCQAMNRRNGKETKSNYRVRVYQIPGKPEIVDSASELTAGVPNKVGTC
VSEGSYPAGTLSWHLDGKPLVPNEKGVSVKEQTRRHPEGLFTLQSELMVTPARGGDPRTFSCSFSPGLPRHRALRTAPIQPRVWEPVPL
EEVQLVVEPEGGA VAPGGTVTLTCEVPAQPSPQIHWMKDG VPLPLPSPVLILPEIGPQDQGTYS with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 8.0.



SDS-PAGE analysis of recombinant human RAGE

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.